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ABSTRACT

This report represents Canada's background report to a review of the transition from initial education to working life. Part 1 is a paper on the context of Canadian education (social, economic, and educational environment) and common issues across Canada. An examination of issues shows that transition is now a more challenging period; the concept of transition is evolving as a result of the changing characteristics of the labor market and changing aspirations of young people; public attitudes toward employment prospects for young people may be too pessimistic; and many groups cooperate in design, funding, and delivery of transition programs and services. Significant trends include the following: (1) increased diversity of approach, (2) a shift from specific vocational courses to broad-based technology courses; (3) integration of work experience into secondary school; and (4) emphasis on links between curriculum and work. Parts 2 and 3 are case studies from Nova Scotia and Quebec. Each considers context; institutional framework; clarification of the transition concept; concerns about the transition process and outcomes; and changing expectations and objectives. Part 4 presents results of a questionnaire sent to these five provinces: Newfoundland and Labrador, New Brunswick, Ontario, Manitoba, and British Columbia. The 35 questions are grouped in these categories: general, initiatives, trends, programs, youth, and research. (YLB)

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The Education Committee of the Organisation for Economic Co-operation and Development (OECD) launched a thematic review on the transition from initial education to working life at its November 1996 meeting. Six countries including Canada were selected for the first series of studies. The authorities in the countries participating in this series of studies designated national coordinators whose task was to serve as liaison with the OECD Secretariat. We want to thank Pierre Brodeur, Coordinator of International and Canadian Affairs with the Quebec Department of Education, who acted as Coordinator for Canada.

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The Coordinator for Canada and the Committee were responsible for preparing the Canadian report presented here. Various authors participated in writing this document. We want to thank them all for their contribution. They include: Doug Giddings, who at the time was Director of Human Capital and Education Studies at HRDC; Norman Henchey, Consultant; Ann Power, Director, Student Services Division, Department of Education and Culture, Nova Scotia; Colleen Meahan Ferguson, Project Manager, Department of Education and Culture, Nova Scotia; Victor Thiessen, Professor, Dalhousie University; and Diane Simpson, Canadian Affairs Advisor, Quebec Department of Education, who was supported by the members of a Quebec Advisory Committee created for that purpose.

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During the production of this report, a team of four OECD representatives paid a 10-day visit in October 1997. They came to meet with provincial representatives from Quebec and Nova Scotia, as well as federal representatives and people who work in various positions in the field of education. We want to thank all of these partners who spent time with the OECD team, providing them with valuable information for the thematic review on the transition from initial education to working life.

TRANSITIONS IN CANADA: HIGHLIGHTS

- The transition from school to working life in Canada is changing in nature. It is now a more challenging period for many young people. In the North American model of varied transitions and multiple pathways, it is an open-ended process.
- The concept of transition is evolving as a result of the changing characteristics of the labour market and the changing aspirations of young people. The beginning and end of the school-work transition period is less clearly delineated as various mixes of full-time work and study and part-time work and study become more common and as more young people embrace lifelong learning.
- Transitions are especially difficult for certain groups of youth – especially those with limited education, skills and experience – and for Aboriginal youth.
- Public attitudes toward employment prospects for young people may be more pessimistic than the data warrant.
- The unemployment rate and earnings of youth vary significantly according to level of education, especially between those with less than secondary education and those with a postsecondary degree or diploma. Youth unemployment is higher than the adult unemployment rate, but this has been true for many years. Youth unemployment is influenced by economic cycles, youth labour market participation rates and educational participation rates.
- The educational participation rate of young people has increased significantly in recent years. Canada ranks extremely high among Organisation for Economic Co-operation and Development (OECD) countries in terms of the rate of participation in postsecondary education.
- Human resource development and economic policy are largely responsibilities of the federal government; education is the responsibility of the 10 provinces and 2 territories. Many groups are cooperating in the design, funding and delivery of transition programs and services for Canadian youth, such as various federal and provincial government departments, local communities, education systems, business and industry, labour, the voluntary sector, and a variety of institutions, associations and organizations.
- In recent years, a number of significant trends in transition-related programs have occurred in Canada:
  - increasing diversity of approach to programs and services with important initiatives taking place at the national, provincial and local levels;
  - shift from specific vocational courses to broad-based technology courses;
  - integration of some form of work experience into the regular requirements for secondary school graduation;
  - increasing popularity of internship and work-study programs;
  - development of a variety of forms of partnerships between schools and business;
  - emphasis on links between curriculum and work;
  - expansion of information and services about career choices and expectations; and
  - movement to greater curriculum emphasis on outcomes, expectations and standards, especially in relation to basic literacy, communication and employability skills.
- This review indicates a need for more systemic information on programs and services, especially those offered at the local level. It also indicates a need for more research into the characteristics of successful transitions and the short- and long-term effectiveness of transition programs and services.

BACKGROUND

The Organisation for Economic Co-operation and Development (OECD) is engaged in a thematic review of *The Transition from Initial Education to Working Life.*

The Review is using a comparative framework "to document and better understand how the factors affecting transition have changed over the years, and to identify the major reasons for the success or otherwise of different policy orientations and specific programs." The study includes a series of Country Background Reports intended to provide a brief overview of major changes in young people's transition to working life, emerging issues of concern and policy responses in the country concerned.

This report represents Canada's Background Report as a contribution to this Review.

The Canadian response has been a collaborative effort involving the:

- Secretariat of the Council of Ministers of Education, Canada (CMEC);
- Nova Scotia Department of Education and Culture;
- Quebec Department of Education;
- Applied Research Branch, Human Resources Development Canada (HRDC); and
- other provinces (Newfoundland and Labrador, New Brunswick, Ontario, Manitoba and British Columbia).

The Quebec Department of Education was responsible for coordinating Canadian participation at the thematic review (to organize the OECD experts' visit) in collaboration with the Nova Scotia Department of Education and Culture, the CMEC Secretariat and HRDC.

The Canadian response involves four parts:

- a paper on the context of Canadian education and common issues across Canada;
- a case study from Nova Scotia;
- a case study from Quebec; and
- results of a questionnaire sent to five participating provinces: Newfoundland and Labrador, New Brunswick, Ontario, Manitoba and British Columbia.

1. COMMON ISSUES ACROSS CANADA

The transition of young people from education to work has been a major preoccupation in Canada during the 1990s. Government policy documents, academic studies and debates in the media have all reported on the issue.

There are a number of related issues: the high rate of youth unemployment, the changing nature of the Canadian economy and job market, rising expectations of young people for postsecondary education, the concern for adolescents at risk of leaving school without the necessary skills, and the degree to which formal educational programs at the secondary and postsecondary levels are adequately preparing young people for the world of work in the 21st century.

Questions

Among the questions being asked are: What do we mean by school-to-work transition? When does it begin and end? Is there a problem related to this phase? Is there a "job crisis" for graduates? Is the job market changing and, if so, do we need new conceptions of "job," "job preparation," "work" and "work skills?" Are young people being well prepared for the Canadian, North American and global job markets? What factors affect the success of school-work transitions? What steps should be taken to improve the transition from education to work? Do we need more and better information to enlighten the issues around transitions and their policy implications?[1]

Context

The Social Environment

Although Canada occupies a territory almost the size of Europe, its population is relatively small (30 million) and most people are clustered close to the border with the United States in large urban areas. Almost one Canadian in four lives in the metropolitan areas of Toronto or Montreal. The Canadian experience has been shaped by its northern location, broad expanses, plentiful natural resources, regional identities and proximity to the world's most powerful nation.

Because of geography, Canadians have in the past relied on their natural resources, especially lumber, mining, hunting, agriculture, fishing and hydroelectric power, as their main source of wealth and a major provider of jobs. Because of history and demography, Canadians have a strong sense of regional identity and minority entitlement: Atlantic Canada, Quebec, Ontario, the Prairies, British Columbia, the North. One Canadian in five has French as a mother tongue; in addition, the cultural, linguistic and ethnic diversity of the population has been increasing through immigration.

These regional and ethnic identities are also reflected in the political structure of the country and in the structure of the national and 12 provincial/territorial governments. Because of the powerful magnet of their southern neighbour, Canadians are influenced by American media, American trends and American values.

In recent years, Canadian society has undergone some important transformations. Its economy has been moving away from natural resources and goods to the service sector. Its political and social life have been marked by a growing sense of regional and linguistic identity.

Canada is in a state of rapid change, involving political uncertainty, economic restructuring, technological advance, cultural flux and educational reorganization. This has led to a climate of uncertainty and some anxiety, to a rethinking of assumptions, a questioning of institutions and a preoccupation with the future.

[1] The major sources for this section of the report include: various OECD documents [especially *Education and Employment; Education at a Glance: Analysis; Education at a Glance: OECD Indicators* (1996 and 1997); *Economic Surveys: Canada* (1996 and 1997)]; School Leavers surveys (1993 and 1996); National Graduates surveys (between 1986 and 1997); the report tabled by the Canadian Ministerial Task Force on Youth (1996) entitled *Take on the Future*; a variety of analytic studies of the Applied Research Branch of Human Resources Development Canada; Krahn (1996); Betcherman and Lowe (1997); and the Social Research and Demonstration Corporation (1996).

The Economic Environment

In 1996, Canadian gross domestic product (GDP) was approximately C$798 billion or $26,700 per person. Exports account for 38.4 percent of Canada's GDP; its main exports are manufactured goods (28.4%) and motor vehicles and parts (22.6%). Almost 80 percent of its exports go to the United States and 76 percent of its imports come from the United States.[2]

Employment patterns

Over the past 30 years, the distribution of employment throughout the economy has changed in important ways.

Table 1: Employment in Canada (%)

	1961	1997
Agriculture	11.2	3.0
Forestry	1.4	0.6
Fishing, trapping	0.3	0.3
Mining, quarrying, oil	1.3	1.3
Manufacturing	24.0	15.5
Construction	6.2	5.4
Transportation, communication	8.1	6.4
Public utilities	1.2	1.0
Trade	16.9	17.1
Finance, insurance, real estate	3.9	5.7
Community, business and personal services	19.5	38.0
Public administration	5.9	5.7

Sources: Betcherman and Lowe, 1997, p. 26, from Rachel Bernier, 1995 and Statistics Canada, Labour Force Survey, 1997 (annual averages).

The trend for jobs in Canada – shifting from resource and manufacturing sectors to the service sector – makes it important to analyse the structure of the service sector. There are signs of a growing polarization between "good jobs" in dynamic services like financial and business services and "bad jobs" in retail trade and consumer services, the former depending on innovation and knowledge skills and the latter requiring low skills and offering low wages. Most new service jobs are being created at the two extremes.

Another feature of the employment picture is the increase of non-standard work involving part-time work, short-tenure jobs and own account self-employment. These forms of employment have increased from 25.2 percent in 1976 to 31.7 percent in 1997. It is important to note that non-standard work has accounted for roughly one half of the job creation in the past two decades. Furthermore, involuntary part-time work has increased as a share of total part-time work. Growth in full-time, long-tenure, own account self-employed has been particularly strong since 1992, accounting for one third of net job creation between 1992 and 1997.

Since the 1970s, there have been two trends in earnings. "A number of studies have shown that, compared to the 1970s, there are more Canadians in high-earner and low-earner categories, with relatively fewer in the middle. Not only have earnings become more polarized, but they also have stopped increasing. The robust real wage increase of the 1950s and 1960s slowed dramatically in the 1970s and essentially had disappeared by the 1980s."[3]

A significant feature of the Canadian labour force in the past 20 years has been the rise in educational attainment. Canadian workers are now among the best educated in the world. In 1975, 22 percent of men and 24.5 percent of women had a postsecondary certificate or diploma, or a university degree; in 1995, the comparable figures for those in the labour force were 46.4 percent for men and 48.4 percent for women, the highest among OECD countries.

Unemployment

The unemployment rate in Canada is an especially sensitive issue and a matter of considerable comment and concern. Over the past 50 years, the rate has fluctuated from a low of 2 percent in 1947 to a high of 12 percent in 1983. In 1997, it was just under 9.2 percent. The changes in unemployment rates reflect the influence of several factors: the effects of

[2] OECD, *OECD Economic Surveys: Canada 1997*, 1997.
[3] Betcherman and Lowe, *The Future of Work in Canada*, 1997, Chapter 4.

business cycles, increase in population due to the "baby boom," increasing participation of women in the labour force, and structural changes such as the introduction of technology and the globalization of markets.

As the OECD has commented: "The performance of the Canadian labour market is somewhat paradoxical: employment growth rates . . . are amongst the highest in the OECD (and greater even than in the United States), although the unemployment rate has exhibited an upwards trend."[4]

Since the 1970s, unemployment rates have varied according to age groups but have followed the same general pattern. In the late 1970s, unemployment rates were almost 15 percent for the 15 to 24 age group, just over 5 percent for the 25 to 44 age group and just below 5 percent for the 45 to 64 age group. During the 1980s, unemployment rose for all age groups, but the rise was especially sharp during the recession of the early 1980s for the 15 to 24 group, reaching 20 percent in 1983. Between 1992 and 1995, the youth (15-24) unemployment rate decreased from 17.8 percent to 15.6 percent, but increased to 16.7 percent in 1997. During these years, the youth unemployment rate remained nearly twice the adult unemployment rate.

Compared with 24 other OECD countries, the 1995 Canadian youth (15-24 age group) unemployment rate (15.6%) was in a group of 10 countries with a rate of between 10 and 20 percent. The United States (12.1%), Australia (14.4%) and United Kingdom (15.5%) were some of the countries in this group. Nine other countries have had a rate lower than 10 percent, including Switzerland (5.5%), Japan (6.1%) and Germany (8.5%). The unemployment rate of 6 countries was higher than 20 percent. France (25.9%), Italy (32.8%) and Spain (42.5%) were in this group.[5]

Within Canada, youth unemployment tends to rise from west to east: 15.2 percent in British Columbia, around 12.5 percent in the three Prairie provinces, 15.6 percent in Ontario, 18.9 percent in Quebec, about 19 percent in the three Maritime provinces, and reaching a high of 29.0 percent in Newfoundland.[6]

The Education Environment

Canada comprises 10 provinces and 2 territories, each of which, within the federal system of shared powers, is responsible for education. The *Constitution Act, 1867*, provides in part that "in and for each province, the Legislature may exclusively make laws in relation to education." Therefore, each of the provinces and territories has developed its own educational structures and institutions; while these are similar in many ways, they reflect the circumstances of regions separated by great distances and the diversity of the country's historical and cultural heritage.

The Government of Canada has assigned responsibility for the delivery of educational services to the two Northern territories through two federal statutes, namely, the *Northwest Territories Act* and the *Yukon Act*. It provides funding to these territories and each territorial government determines its education funding level, according to trade-offs with its other priorities. In 1999, the Northwest Territories will be divided and a new territory will be created, Nunavut. Education responsibility in both new territories will follow the model described above.

Provincial/territorial authority over education brings with it the power to delegate authority to local school boards or to other bodies set up or recognized by the province or territory.

Organization

The Council of Ministers of Education, Canada (CMEC) was established in 1967 by the provincial ministers, with the concurrence of their respective governments. In a context where each province and territory is responsible for its education system, CMEC offers ministries and departments of education the unique opportunity to work collectively.

Through CMEC, cooperation among the provinces and territories is effected in a broad range of activities at the elementary, secondary and postsecondary levels. An arm of the

[4] OECD, *OECD Economic Surveys: Canada 1996*, 1996, p. 59.
[5] OECD, *OECD Employment Outlook*, 1996.
[6] Statistics Canada, *Labour Force Survey*, 1996.

provinces, CMEC is the Ministers' mechanism for consulting on matters of mutual interest, representing Canada internationally on education matters, providing liaison with various federal departments and cooperating with other national education organizations.

There is no federal ministry of education at the national level. However, several federal departments have related areas of interest, especially Statistics Canada which provides data and analysis about all aspects of education; Human Resources Development Canada (HRDC) which conducts surveys, provides services and information, and does research in the areas of literacy, lifelong learning and school-work transitions; Industry Canada (IC) which offers services and links to Canadian schools and teachers through SchoolNet (at least for Quebec, these services are in addition to existing educational computer telecommunications networks); and the Social Sciences and Humanities Research Council (SSHRC) which funds educational research.

In addition, there are important national organizations that provide coordination and exchange of information, especially the Canadian Education Association (CEA) which links various education organizations; the Association canadienne d'éducation de langue française (ACELF); and the Association of Canadian Community Colleges (ACCC) and Association of Universities and Colleges of Canada (AUCC) which represent the interests of postsecondary institutions.

Structures

Education is compulsory, normally from the ages of six or seven to age sixteen. In most provinces, the public education system begins with kindergarten for five-year-olds, followed by elementary school which lasts five years (Saskatchewan), six years (in eight provinces/territories), seven years (British Columbia), or eight years (Ontario and Manitoba).

Secondary schools usually continue from the end of elementary education through the 12th year (an exception is Quebec where it ends at Grade 11). Eight provinces and territories include a junior high school or middle school between elementary and secondary levels, usually lasting three years. While some secondary or high schools offer only academic or only vocational programs, most secondary schools offer a mix of academic and vocational courses, though secondary vocational programs are declining in many jurisdictions.

After secondary school, students may continue their studies in community colleges which offer technical programs and sometimes academic university-transfer programs, or in universities which offer bachelor's programs (three to five years), master's programs (one to two years) and doctoral programs (three years or longer).

Most universities have a range of academic and professional programs including arts, science, commerce, engineering and education; some universities offer medicine, law, dentistry and agriculture. In Quebec, students go on from secondary school to general and vocational colleges (collèges d'enseignement général et professionnel, or CÉGEPs) where they follow either a two-year pre-university program or a three-year technical program.

There is also a wide range of adult education facilities and services, literacy programs, private postsecondary training institutions, training programs in business and industry, and distance education services.

Canadian education reflects the religious and linguistic diversity of the population. In addition to public schools, there are publicly funded separate schools (Catholic schools and a small number of Protestant separate schools) in Newfoundland, Quebec, Ontario, Alberta and Saskatchewan. Changes are currently taking place in the religious structures of schools in Newfoundland and Quebec. Most provinces have minority-language schools, French in the majority of cases and English in Quebec; New Brunswick and Ontario have extensive French-language school networks. In addition, French immersion programs are available in most provinces; these involve teaching a number of school subjects in French.

Vocational training takes place in many secondary schools, specialized trade schools, private institutions, community colleges and in

adult education services offered by school boards and governments.

Institutions and Enrolments

There are about 16,000 elementary and secondary schools across Canada, over 200 post-secondary community colleges and 77 universities. These are staffed by almost 300,000 elementary and secondary school teachers and more than 60,000 postsecondary instructors and professors. These institutions and teachers serve more than 5 million elementary and secondary school students, 400,000 college students and 600,000 university students. Private school enrolments account for 5 percent of the elementary-secondary total.

In 1993, more than 300,000 students were enrolled in trade and vocational programs in trade schools and community colleges, over 50 percent of them in pre-vocational programs, 25 percent in pre-employment programs, 17 percent in registered apprenticeships and 3 percent in skills upgrading. In 1993, 5.8 million Canadians (28% of Canadians aged 17 or over) participated in adult education and training activities.

After 15 years of decline, elementary-secondary enrolments have increased since 1986. Full-time college enrolments have continued to increase and women account for 53 percent of the total; full-time university enrolments have continued to increase through the 1990s.[7]

The educational aspirations of Canadians have continued to increase. In the 18 to 24 age group, one person in three is enrolled in post-secondary education (31% of men and 36% of women). Between 1989 and 1996, the proportion of 15- to 24-year-olds attending school full time increased by 8.8 percentage points, reaching 56.6 percent in 1996. The increase in the enrolment rate has been particularly important for the 20 to 24 age group: the increase for the 15 to 19 group was 4.3 percent whereas the rise for the 20 to 24 age group was 10.5 percent.

In 1991, 18 percent of young people 20 years of age had not completed their high school diploma and four years later the rate had dropped to 15 percent. School leaver[8] rates were highest in the Atlantic provinces and Quebec, and lowest in Saskatchewan, Alberta and British Columbia.[9]

Attainment

Compared to selected other OECD countries in the International Adult Literacy Survey (IALS), Canada shows a certain polarization in literacy levels. It has the second highest proportion of adults at the highest literacy levels (percentage at levels 4 and 5), next to Sweden; it also has the second highest proportion at the lowest literacy level (17 percent), next to the United States.[10]

In the Third International Mathematics and Science Survey (TIMSS) of the attainment of Grade 8 students in over 50 countries, Canadian students did as well as or better in mathematics than students in 30 other countries, and not as well as those from 10 countries; in science, Canadian students did as well as or better than students in 31 countries and not as well as those from 9 countries.[11] TIMSS also looks at the attainment of students who were in the last year of a secondary education program. A total of 24 countries and four Canadian provinces took part in at least one of the three parts of the study (Mathematics & Science Literacy, Advanced Mathematics and Advanced Physics). In Mathematics Literacy, the score for Canada was significantly higher than that of nine countries, the same as six and significantly lower than five. Only three countries performed significantly better than Canada in Science Literacy. Six countries performed as well as Canada and Canada outperformed 11 countries. In Advanced Mathematics, Canada's overall test results were the same statistically as seven other countries,

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7 Statistics Canada, *Education in Canada*, 1996.

8 The term "dropout" has been used to describe all non-completers regardless of the reasons or conditions which mark their leaving. It also carries a pejorative or stigmatizing connotation associated with individual failure. Non-completers are, however, a relatively heterogeneous group. Consequently, the more neutral designation "school leaver" is used in this text.

9 HRDC and Statistics Canada. *After High School: The First Years*, 1996a.

10 OECD, *Literacy, Economy and Society*, 1995.

11 Robitaille et al. TIMSS Canada Report, 1996.

higher than six and lower than two. Finally, the performance of Canadian students in physics fell into the middle cluster of nations participating in the study, but the results are below the international average.[12]

Finance

A total of C$59 billion was spent to support the Canadian system in 1995: 61 percent for the elementary-secondary sector, 7 percent for colleges, 20 percent for universities and 11 percent for vocational training. The cost of education was almost $2,000 per capita and represented 7.6 percent of the GDP. Provincial governments contributed 55 percent of education financing, 21 percent came from local taxation, 11 percent from the federal government and 12 percent from non-governmental (private) sources.[13]

Current trends

During the past decade, some significant trends and developments have taken place in Canadian education.

School organization and funding: Many provinces have been reducing the number of school boards and enlarging their size; everywhere there have been budget constraints as federal and provincial governments have attempted to reduce expenditures and control public debt.

National and local levels: At the national level, there has been greater cooperation among organizations. At the provincial level as well, more cooperation has taken place in matters of curriculum and general policy, sharing information and in efforts to link research, policy and practice. At the local level, there is growing interest in school-based management and parent involvement in school policy.

Quality and assessment: School systems have been under criticism about issues related to standards and expectations, the performance of Canadian students in international studies of educational attainment, the teaching of basic skills, and the effectiveness of schooling in preparing for a changing world of work. There has been a general increase in the emphasis on evaluation and assessment, including the School Achievement Indicators Program (SAIP) of the CMEC. Standardized testing is also occurring at the provincial level; many school boards have introduced their own system of standards and benchmarks, and have been trying new methods of reporting progress to students and parents.

Needs and services: Schools and school systems have also been attempting to be more inclusive and responsive to the needs of all students, especially those with disabilities, those needing special efforts in the language of instruction, Aboriginal students, visible minorities, and those needing special attention in order to succeed. Schools have been especially concerned with developing programs and services for students at risk of leaving before graduating. Schools are being asked to expand the range of services they provide, including extended day and daycare facilities in recognition of the changing patterns of the work-family balance, programs of conflict resolution, health, safety and tolerance.

Technology: School systems have invested enormous resources in providing computers, CD-ROMs, learning software and links to networks and electronic learning resources. Some of these resources are in computer labs and libraries, but the trend is to have more computers in classrooms and workshops. Many schools now have their own Web page, often designed and maintained by students. The federal initiative of SchoolNet seeks to link all Canadian elementary and secondary schools in the near future. In Quebec, the Department of Education has undertaken a major initiative to network all the educational institutions electronically.

Curriculum: In developing curriculum, efforts have been made to identify key cross-curricular outcomes or expectations such as literacy and numeracy, communications, technological competence, problem-solving and thinking skills, and personal/social skills. There is a trend to increase the rigour of core subjects, especially languages, mathematics and sciences, and to provide new curriculum

[12] Robtaille et al. *TIMSS-Canada Report, Volume 4: Senior Secondary*, 1998.
[13] Statistics Canada, *Education Quarterly Review*, vol. 4, no. 3, 1997.

areas such as technology and interdisciplinary studies, especially at the elementary and middle school levels.

Second languages: Canadian schools have been in the forefront in the field of second-language instruction, pioneering a variety of French immersion programs. These continue to be popular and there is a growing interest in Asian languages.

Outcomes and work-related projects: Many schools are moving to a system of outcomes-based education, to patterns of cooperative learning and to alternative forms of assessment such as portfolios. Many secondary schools have put increased focus on "employability skills" and a list of these skills has been developed by the Conference Board of Canada. Schools have established a variety of links with local business and industry, including partnerships, cooperative education projects, internships and work-study programs. The Quebec Department of Education is currently revising all its technical and occupational training programs to reflect the desired skills.

Postsecondary trends: Colleges and universities have been moving in the direction of closer links with business and industry, and there is a growing emphasis on technical and professional programs. Institutions and programs are becoming more entrepreneurial and competitive in their search for students and funds. Universities, in particular, are concerned about the level of funding they are receiving, future prospects and trends in funding, and the implications for the quality of teaching and research they will be able to provide.

Canadian education is undergoing a period of important change, in its structures, finance and operations, as well as in its goals and assumptions. Although it continues to be influenced by developments elsewhere, especially in the United States, Canada has led the way in many areas of educational reform. Distinctions among schools and jurisdictions are becoming less pronounced as common pressures and collaboration lead to some similar patterns, even though provinces are responding differently to these challenges.

Transitions

We have tended to think of school-to-work transition as the time when a person moves from full-time school attendance, usually in a secondary school or postsecondary institution, to full-time and permanent employment in the adult labour market. You quit school or you graduate, and you "go to work."

The Nature of Transition

In Canada today, the process of transition is more circuitous, and the concept is more complex than this. Many people are mixing schooling and working in various patterns. Some people are working while they are attending school; others are studying while they are working. Some make the transition from school to work more than once, entering the labour market, going "back to school," then returning to work. Some migrate from one learning program to another (e.g. obtaining a university degree and following it up with a technical program in a college). Some initial employment is still a transition as people look for a job that more closely matches their qualifications and interests. The passages are better described as *school-work transitions* than as the school-to-work transition.

The transition from initial education to working life may refer to:

- a *process* through which a person passes;
- a *concept* or *set of relationships* which can be defined and delimited; and
- a set of *programs*, *resources* and *services* directed to those moving from full-time school to full-time work.

It is not clear what should or should not be included in the concept of "transition," when it begins and ends, how long it takes, what changes are taking place in the transition process over time, what factors make a transition successful or unsuccessful, how we define a "successful" transition, how successful transitions are for different individuals and groups, and what, if anything, should or can be done to make the process more effective.

To give some indications of the age when the transition is occurring and the length of the

transition, the OECD adopted the following definition: the transition period may be defined as commencing in the first year of age at which fewer than 75 percent of the population are in education, and as ending in the first year of age at which 50 percent of the population are in the work force but not in education. In Canada, the transition lasted from 16 to 23 years of age in 1994, two years longer than it did in 1984 (from 16-21 years of age). From that definition we can conclude that the transition period is longer (6 years in 1984 compared with 8 in 1994), but we cannot conclude that the beginning of the transition period is occurring later (16 years old in 1984 and 1994).[14]

Various factors affect the nature, duration, timing and success of school-work transitions. These include:

- interests, attitudes and expectations of the individual;
- educational and personal preparation of the individual;
- structure of the labour market;
- real and perceived job opportunities in different careers and in different locations;
- size of the cohort in the transition phase;
- unemployment rates for the young and for older workers with whom youth must compete;
- willingness and ability of the person to relocate and to select alternative careers; and
- availability of multiple opportunities to continue learning throughout life.

Importance

School-work transitions are a major preoccupation in Canada at the present time, among students and parents directly involved in the process, and among policy makers, economists and educators who seek to facilitate the transitions. There is a considerable amount of media comment on the subject, especially related to job prospects for young people, and the extent to which young people are being prepared in school with the skills and attitudes needed in the changing job market. It is the subject of a growing body of scholarly literature, drawing from economics, sociology and education; many associations are making it a topic of conferences.

The Conference Board of Canada has been influential in bringing the topic to the attention of educators and the public, especially through its efforts in school-business partnerships and its publication of a list of "employability skills" which has been widely circulated throughout the education community. At different levels and in different ways, the provinces are also making efforts to bring the education and the labour market closer together.

The federal government, especially HRDC, has drawn attention to the links among schooling, school retention and employment. At the last First Ministers' Meeting, in December 1997, First Ministers agreed that youth employment is a national priority. They committed to a youth employment action plan. The plan included these four objectives:

- maintaining and improving access to education and skills;
- providing more work opportunities, both for those making the school-work transitions, and for those who may be "at risk";
- helping youth adapt to an increasingly complex and changing labour market; and
- helping youth address the social and cultural barriers that prevent full labour market participation.

In December 1996, the SSHRC, the major Canadian research funding agency in the area, created five large-scale research networks in education and training, involving 140 researchers and 150 community organizations and private-sector companies. The five networks are: Education, Training and Employment Research Network (led by the Université du Québec à Montréal); Network for the Evaluation of Education and Training Technologies (McMaster University in Hamilton); Research Network for New Approaches to Lifelong Learning (University

[14] OECD, *Education at a Glance: Analysis*, 1996.

of Toronto); Labour Training Research Network (York University in Toronto); and the Western Education and Training Research Network (University of British Columbia). The total grant is C$5.6 million over five years.

Many schools and school systems are introducing programs related to work-study, cooperative education and formal school-to-work transition programs.

Perceptions

There is a widely held belief among Canadians at the present time that school-work transitions are more difficult today than in the past. Many believe that even highly qualified university graduates are having difficulty obtaining appropriate employment and that many of the jobs formerly available to young people have been eliminated due to technology, corporate restructuring and the global economy. Newspaper headlines reflect this belief: "More bad news for young Canadians," "It doesn't pay to be young," "Youth face jobless crisis."

Many ask: Are jobs becoming a scarce resource in our society just as more and more young people are graduating with higher and higher qualifications? Is the high unemployment rate of older workers with experience making it more difficult for the young to compete? Are we producing too many educated young people for the market? Is the problem a supply problem or a demand problem?

There are a number of reasons for these pessimistic perceptions. Many of today's parents and opinion makers grew up during the expanding economy of the 1950s, 1960s and 1970s, and use these decades as the benchmark for comparison with the 1990s. The average unemployment rate in Canada was under 4 percent in the mid-1960s and is almost 10 percent today. If one relies on a single indicator (e.g. youth unemployment rates) without reference to other indicators (e.g. labour force participation rates, participation in higher education), a distorted picture of the situation can result. Many people generalize from anecdotal information about underemployed graduates sending hundreds of unsuccessful job applications over months or even years. High levels of unemployment in certain regions and metropolitan areas, and in certain occupations, are sometimes assumed to be characteristic of all regions and occupations.

Canadians are anxious about the economy and jobs. In 1996, 44 percent of Canadians thought they could lose their job in the next couple of years.[15] Many of the large employers of previous decades that used to provide a pool of full-time and secure jobs – governments, the education and health care systems, banks, insurance and telephone companies, multinational corporations – are now reducing their staff by downsizing and outsourcing.

There is little doubt that the large economic and social forces, such as new communications and information technologies, globalization of markets, NAFTA, the shift of jobs from secondary to tertiary sectors, and the restructuring of corporations, are all having important consequences on the nature, conditions and type of work available, and the kinds of skills – and attitudes – needed.

As Betcherman and Lowe (1997) pointed out in their book on the future of work in Canada: "Canadians are anxious about their jobs, the economy, and their ability to cope with all of the pressures of a rapidly changing society. Whether or not the facts justify the high degree of anxiety that prevails, there is little doubt that the feeling itself is 'for real.'"

What the Studies Suggest

Surveys of graduates and other studies suggest a somewhat more optimistic picture.

Transition patterns

There are new mixes of school and work: a majority of high school students hold a part-time job, but the participation rate of workers 15 to 19 years of age declined from over 70 percent in the late 1980s to 65 percent in 1995.

Youth unemployment

It is not a recent phenomenon that youth unemployment has been higher than adult unemployment. Youth unemployment rates

[15] Ekos Research Associates, *Rethinking Government*, 1996.

are also more sensitive to economic cycles. This has been consistently the case for the past 20 years. Youth unemployment in Canada is 1.8 times greater than for that of adults; this compares with 0.9 in Denmark and Germany, 2.7 in France, 2.3 in the United States and 2.0 in the United Kingdom.

Educational attainment

Surveys tell us that 85 percent of young people now complete secondary school. Of these, 40 percent go to university and another 30 percent go to community colleges.

The percentage of 15- to 24-year-olds enrolled in school full time increased from the early 1980s from just under 40 percent to over 56 percent in 1996. The percentage of 18- to 24-year-olds enrolled in full-time undergraduate programs increased from 17.6 percent in 1981 to 28.2 percent in 1992. Women now account for 54 percent of full-time undergraduates and 44 percent of graduate students.

Seventeen percent of the Canadian population 25 to 64 years of age has a university degree, making it one of the best educated populations among OECD countries, after the United States (25%), the Netherlands (22%), Norway and Korea (18%). It leads OECD countries in the percentage with postsecondary education in college or university (47%).[16]

Education and employment

Level of education makes a significant difference in the unemployment rate. In 1997, the unemployment rate for the population aged 15 or over was 9.2 percent. Table 2 shows the rates for different educational attainments.

In addition, the unemployment rate for high school graduates *with* further education and training age 22 to 24 in 1995 was 10.8 percent; for young graduates *without* further training it was 12.9 percent. For high school leavers, the unemployment rate was 20.9 percent (17.3% for young men and 30.2% for young women).[17]

[16] OECD, *Education at a Glance: OECD Indicators*, 1997.
[17] HRDC and Statistics Canada. *School Leavers Follow-up Survey*, 1995b.
[18] Statistics Canada. 1992 Survey of 1990 Graduates.

Table 2: Unemployment, by Educational Attainment (%), 1997

	Total	Men	Women
Total	9.2	9.2	9.2
0-8 years of schooling	15.2	15.3	15.1
Some secondary schooling	16.0	15.8	16.2
Graduates from high school	8.8	8.8	8.8
Some postsecondary studies	10.4	10.4	10.3
Postsecondary certificate or diploma	7.5	7.4	7.6
University degree	4.8	4.5	5.2

Source: Statistics Canada, Labour Force Survey, 1997.

Two years after graduation, most of the postsecondary class of 1990 had full-time jobs: 64 percent of those in trades and vocational programs, 76 percent in career and technical programs, 73 percent with bachelor's degrees, 75 percent with master's degrees and 87 percent of those with a doctorate.[18] A substantial number of graduates also pursue further studies. Table 3 shows the educational and labour market situations of the 1990 graduates five years after graduation.

Table 3: Educational and Labour Market Situations of 1990 Graduates in 1995 (%)

1990 Graduates	Trades/ Vocational	College	University
Full-time work	69	78	80
Part-time work	10	11	9
Unemployed	12	6	6
Not in the labour force	7	4	5
Directly related job	41	44	34
Partly related job	44	48	60
Same employer (1992 & 1995)	41	52	49
Pursued other studies	41	47	58

Source: HRDC and Statistics Canada, **The Class of '90 Revisited,** *1997b.*

Earnings

The real annual earnings of youth have decreased substantially since 1981, and the gap between real earnings for youth and for the

population 45 to 54 is widening. However, the earnings of postsecondary graduates at all levels have remained stable over the past decade, despite the increased number of graduates.

Earnings as well as job prospects are affected by education. The median earnings of 1990 graduates working full time, two years after graduation, were $23,000 for graduates of trade/vocational programs; $26,000 for college graduates; and $32,000, $44,000 and $46,000 for bachelor, master's and doctorate graduates, respectively.

Estimated annual earnings for career and technical graduates (i.e. college graduates) ranged from $21,000 in arts to $32,000 in health sciences. For bachelor's degrees, the range was from $23,000 in fine arts to $38,000 in health professions; for master's graduates, from $30,000 in fine arts to $52,000 in education; for doctorates, $35,000 in agriculture and biological sciences to $55,000 in education.

Between 1992 and 1995, median salaries increased 14 percent for trade/vocational graduates, 10 percent for college graduates and 15 percent for university graduates.

Jobs

Forty percent of youth in the labour market are in non-standard types of employment (part-time, temporary, self-employed); this is to an important extent a function of the increase in full-time enrolments in education.

In the first half of the decade, jobs requiring high school or less declined while those requiring postsecondary education increased. At the extremes, jobs for the 15 to 24 age group requiring only elementary schooling declined by over 30 percent; jobs requiring a university degree increased by 20 percent.

Occupational projections for the 1990s[19] suggest a polarization in skill levels needed for jobs. They claim that 55 percent of the net change in jobs will be in those that require more than 16 years of education and on-the-job experience. There will be a dramatic increase in the proportion of these highly skilled jobs, but a significant job growth will also be in jobs requiring less than 12 years of schooling. Estimates of the growth of jobs by educational level for the period 1990 to 2000 are: less than 12 years of schooling, 40 percent; 12 years of schooling, -2 percent; 13 to 16 years of schooling, 7 percent; more than 16 years of schooling, 55 percent.

Projections for the next five years suggest a growth in the goods production sector of about 83,000 jobs per year and in the services sector of about 191,000 per year. Key industries for job growth are expected to be transportation equipment and investment good industries, business services, and consumer service such as food and accommodation, amusement and recreation. Job creation will be lower in industries that are making strong productivity gains (e.g. trade) and those that rely on government expenditures (e.g. education).[20]

Transitions Patterns in Canada — Summary

Transitions in Canada are in a process of constant change in response to youth aspirations and the job market, provide flexible and alternative pathways between education and work, and thus provide multiple chances and different opportunities. Following are some generalizations about the patterns of transition in Canada at the present time:

- It is becoming more difficult to define the period of school-work transitions as more people mix education and work in a variety of patterns.
- Transitions are more varied, more complex and more circuitous.
- Following the OECD definition, the transition period is becoming longer in Canada.
- There is considerable anxiety about job opportunities for Canadians, especially for young Canadians.
- The youth unemployment rate is significantly higher than for the adult population but this has been the case for some time.
- The youth unemployment rate is influenced by economic cycles, youth labour market

[19] HRDC, *COPS 1997*, 1997a.
[20] Ibid.

participation rates and educational participation rates.

- Educational aspirations of young people are rising and their participation rate in education has been increasing substantially; they are staying in school longer, they are less likely to drop out and a higher percentage of the age group are going on to postsecondary studies.
- This increased educational participation of youth has resulted in a decline in youth labour market participation and an increase in non-standard employment for young people.
- Canada has one of the best educated work forces among industrialized countries.
- The greater the level of education of young people, the better their chances of getting a full-time job and the higher their salary.
- The vast majority of postsecondary graduates have full-time employment within two years of graduating.
- Earnings of young people working full time reporting on a one-year basis have been declining in recent years, but the earnings of postsecondary graduates have remained stable over the period.
- The majority of jobs are now and will continue to be in the service sector, which comprises many non-standard jobs.
- Job opportunities are becoming polarized; the greatest areas of growth are in high-skill jobs requiring over 16 years of education and in low-skill service jobs requiring less than 12 years of schooling.
- There are poor employment prospects for youth without postsecondary qualifications, especially for young women.
- Part-time employment of youth has increased significantly over the past 15 years; the rate declines as youth move toward the end of the transition period. A significant proportion of part-time work among youth is involuntary.
- Adult education and training is providing alternative routes of transition to the labour market and within it, but mainly for those who already possess a good initial education.
- There is a considerable amount of work to be done in analysing issues around youth transitions and employment, and in bringing together public perceptions and research data.

Responses

In response to the difficulties facing young people in their transitions from schooling to work, federal and provincial governments, associations, business groups and educational institutions have developed a range of programs and services to help.

Provincial Governments

Most governments in the 10 provinces and 2 territories have been involved in special programs to deal with problems of school-work transitions, many in collaboration with the federal government, schools and the private sector.

Initiatives in provinces participating in this study are described in detail in later sections of this report.

Federal Government

The federal government has overall responsibility for the Canadian economy; for ensuring its development and success, the supply of capital, human resources and expertise; and for providing leadership and collaboration with other groups to maintain a dynamic job market.

HRDC, formerly Employment and Immigration Canada, has sponsored a series of projects related to lifelong learning, literacy, human resource development, employment and transitions. There are two types of projects: programs that provide resources and services, and research that includes surveys and pilot projects.

Youth Internship Canada is a program which provides young people with skills enhancement, work experience and entrepreneurial assistance to help them make a successful transition to the labour market. Projects encourage active partnership between the private and

voluntary sectors, as well as with other levels of government.

HRDC provides contribution funds to projects which offer unemployed and underemployed non-student youth (normally under age 30) work experience in their local labour market and in growth sectors of the economy. Internships take place in Canada or abroad, in key areas such as science and technology, international trade and development. This initiative also responds to the needs of First Nations and Inuit youth.

Internships are an important means by which to address long-term solutions to systemic impediments to successful transitions to the labour force. In 1997-98, more than 25,000 Canadian youth participated in *Youth Internship Canada* initiatives, at a cost of $160 million to the Government of Canada. Additional funds toward the cost of intern salaries and project management are contributed by partner organizations.

Youth Service Canada is the second major work experience program funded by Human Resources Development Canada. Through community service projects, work opportunities are created for non-student youth (normally under age 30) who face greater barriers to entering the labour market. Projects challenge young people to invest their time, energy and expertise in their own communities, through meaningful service projects designed and implemented by community-based groups. Young people acquire valuable work and life skills while gaining a sense of accomplishment and attachment to their community. In 1997-98, more than 5,000 youth participated in Youth Service Canada, at a cost of $50 million.

Summer Student Job Action is a program which creates summer work experiences for secondary and post-secondary students. It is a program undertaken in partnership with the private and non-profit sectors, and helps students in a variety of ways, including: wage subsidies to employers; interest-free business loans to students; promotional activities; and information. In 1997-98, 63,650 students participated in the program, at a cost of approximately $123 million.

HRDC also contributes to successful labour market transitions through the *Youth Information Initiative*. It provides labour market and education/career-planning information to youth, funds activities that heighten awareness and promotes action on youth employment issues. Its products and services include: the *Youth Resource Network* Website (a single access point for work experience, labour market, education and career information) at www.youth.ca; the *Youth Info Line* (a toll-free, bilingual information line on all Government of Canada youth initiatives); *Youth Link* (an annually undated compendium of information on a wide range of youth programs, services and resources); *Youth Info Fairs* (exhibits to inform youth about Government of Canada youth resources, programs and services); and *Youth Awareness Initiatives* (funding to help organizations raise awareness about youth employment-related issues).

The federal government has also supported projects in cooperation with provincial governments, for example, in Nova Scotia and New Brunswick.

The Applied Research Branch of HRDC has sponsored research projects, based on surveys, including the *National Graduates Surveys* which have been conducted regularly since the early 1980s; the *School Leavers Surveys*; a new *Youth in Transition Survey* (now being developed); and the *Adult Education and Training Survey*. The Applied Research Branch participates in various OECD coordinated surveys, notably the 1996 International Adult Literacy Survey (IALS). It has also sponsored a number of research and consultation papers by scholars on issues and literature reviews related to school-work transitions.

The Job Search service on the HRDC Website offers information on careers in a wide variety of fields.

Industry Canada's *National Graduate Register* (NGR) is an on-line employment centre where Canada's students and recent graduates can post their résumés at no charge. Once posted, the résumés are matched with potential employers looking for new recruits. To date, more than 25,000 résumés have been matched with various companies.

Industry Canada also offers the *Student Connection Program*. This program equips students with valuable entrepreneurial work experience by teaching managers of small- and medium-sized businesses how to use the Internet to gain a competitive advantage. The program has enriched more than 2,100 students with valuable work experience and more than 25,000 managers have been trained on how to use the information highway for the good of their enterprises. In addition, 26 percent of the program's student trainers have been offered jobs by clients they met through the program.

Industry Canada's *Computers for Schools* program is another initiative achieving two important objectives. The program, with help from sponsors like Telephone Pioneers, collects computers donated by public- and private-sector sources and delivers them to schools and libraries throughout Canada. Before the computers get to Canadian classrooms, though, they are inspected, repaired, tested and upgraded at 48 refurbishment centres located across the country by volunteers of the Telephone Pioneers and by young people employed by Computers for Schools' Technical Work Experience Program. Already, some 200 young people have gained work experience in a field bound to explode as the information-based economy intensifies.

Associations

A number of national and provincial associations are addressing the issue of transitions through their conferences and publications. One example is the work of the Canadian Youth Foundation. Another involves the Canadian Vocational Association, a grouping of educators at the secondary, community college and adult education levels, which held a conference in 1995 and published the proceedings with the title *Transitions: School to Work to Lifelong Learning*. The Association is also working with HRDC on a project called *The Canadian Restructured School Plan*, which is testing the feasibility of reorganizing secondary schools around the principles of learner guides, outcomes-based education, mastery learning, individualized instruction, flexible entry and exit, and use of technology. The results of this project can provide useful information to the provinces.

The Canadian School Boards Association, which represents school boards and trustees across Canada, has prepared a proposal on technological education to develop curriculum support materials in technological education, emphasizing application-based learning related to the workplace and further education.

Business

The Canadian business community has become increasingly involved in the issue of school-work transitions and in the preparation of young people for the world of work. The Conference Board of Canada has provided leadership by sponsoring school-business partnerships and an annual business-education national conference. It also encourages the business community to become more involved in the field of education.

Individual businesses and industries at the local level are collaborating with schools in providing a variety of partnerships and work-study programs.

At provincial and local levels, corporations have responded to schools for requests of partnerships and sometimes have established or supported special programs for "at-risk" students, offering them skills related to filling out applications, preparing a résumé, presenting themselves in an interview and searching for jobs.

The national business community is also working with the federal government to support school-work transitions. HRDC's SPI brings together employers, employees, educators, trainers, governments and other stakeholders in a national sector to analyse and address cooperatively the human resource issues facing the sector over the long term. Their solutions, systemic in nature, often involve developing and implementing curricula for secondary schools and colleges to ensure that youth learn skills which are relevant to the needs of industry, especially small- and medium-sized enterprises (SMEs). National occupational standards, which describe what people must know and be able to do on the job, are also developed by sectoral partners. National

occupational standards are often the "common language" used to facilitate the development of curricula and other training programs.

Institutions

Educational institutions, especially those at the secondary and community college levels, offer a variety of programs, resources and services directly or indirectly related to school-work transitions and to categories of students who may experience special difficulty finding employment.

School-business partnerships

Partnerships refer to a wide range of relationships between educational institutions and the world of business and industry. They range from sponsorship of an elementary school science fair by a pharmaceutical company to an endowed university chair in electrical engineering by a telecommunications giant. Many secondary schools, departments in community colleges and professional faculties in universities are actively cultivating partnerships with business.

The benefits for the institution and its students may include grants, scholarships and awards to deserving students and educators; funding of special projects; loan or gift of equipment (often computers and equipment for a technology laboratory); opening of the industry to field trips by students; providing expertise to the school in the form of specialists from the industry; teacher sabbaticals in industry; curriculum support in specific areas such as technical education, science and career programs; and a role for members of the business community as mentors for gifted students and for those needing special individual help because they are at risk of losing interest in school.

The business community is becoming increasingly involved in teacher inservice projects to provide knowledge about what is used in the workplace, and to assist teachers to provide more relevant and credible learning experiences for their students.

In some cases, the partnerships lead to limited work-study programs or internships in the business and to part-time student employment while they are studying or even full-time employment after they graduate. However, few partnerships have job placement as one of their goals.

Targeted programs

Some programs are targeted to specific groups: students at risk of leaving school or failing a year; teen mothers; Aboriginal youth; visible minorities; young women interested in mathematics, science and technology careers; students who have physical or intellectual disabilities; those who have low levels of literacy; those not fluent in English or French; and those who have left school without marketable skills.

Vocational programs

Many secondary schools offer vocational programs in traditional occupations such as business and commerce, metal work, carpentry, electricity, electronics, printing, automotive repair, cooking, hairdressing and similar trades. The number and range of such courses at the secondary level has declined in the past 30 years, due to declining enrolments, changes in the skill and technological requirements of the trades, limited job opportunities, the obsolescence of equipment and techniques in many schools, rising aspirations for postsecondary studies, and the tendency to move many vocational programs into postsecondary institutions.

The vocational programs that do continue at the secondary level and in private institutions tend to have small enrolments, be closely linked with the industry sector, and have a good rate of placing qualified students in jobs.

Technology and career programs

Technology and career programs are offered at the community college level and to select students at the secondary level. They are usually demanding programs with high admission standards, especially in science and mathematics, and they lead to specialized careers in such fields as business management and administration, scientific and computer technologies, health-related technologies, industrial processing, fitness, recreation and sports.

These programs typically involve close ties between the educational institution and industry, internships and work-study programs

for students, and relatively well-defined and successful transitions to careers. It is not uncommon for university graduates to "go back" to a community college for a technical program after their academic studies.

Professional programs

Professional programs are normally university-based and involve admission to a professional corporation, often with a qualifying examination separate from the university degree. For many years, law, medicine, dentistry and engineering have been the models of career-oriented programs and smooth education-career transitions. There have usually been close links between the training program and the professional corporation, often through accrediting procedures.

Other professional programs prepare teachers, accountants, business and public administrators, social workers and ministers of religion. Most master's and PhD training is also professional, providing skills and preparing candidates for careers in postsecondary teaching, research and specialized professional practice such as psychology and economics.

Typically, such programs are selective, linked to practice, involve some form of internship, and are sensitive to the job market for graduates (though this last feature has been less common in the fields of teaching and law since the market for graduates is not so clearly defined as in other areas).

Because many of these professions depend directly or indirectly on public funding (e.g. civil service, teaching, medicine, social work, some aspects of law) or on the economic vitality in a region (e.g. management and civil engineering), the transition from education and training to a secure and rewarding career is not always as brief, easy and successful as it used to be in the past.

Entrepreneurship

Over the past few years, there has been an increase in programs that help students to become more enterprising and innovative, and to recognize that entrepreneurship offers a viable career option, especially in self-employment or for small- and medium-sized businesses.

School-based enterprises

Some secondary and postsecondary institutions have officially sponsored school-based enterprises, often operated by student associations. This approach is especially common in French-language institutions. These enterprises usually involve such activities as a credit union, restaurant or cafeteria, equipment repair (auto, computer, electronic equipment), selling arts and crafts made by students, or community services (temporary help, child care or social services).

The purpose of these enterprises is to raise money for school activities and to give students experience in operating a business. There is usually teacher guidance but students are involved in all aspects of the enterprise, from accounting and marketing to sales and production.

Work-study and cooperative education programs

There is growing interest in a range of work-study and cooperative education programs. These may involve limited experience in a business or industry, job shadowing or part-time work for a few hours, or they may involve extensive internships. The involvement of the employer is usually voluntary and students are not remunerated for their work, though in some cases like medical internships and trade apprenticeships, there is payment.

The purpose of some of these programs is to familiarize students with the world of work and to underline the importance of acquiring skills and proper work habits. Such programs are really part of the student's general education. Other programs have more specific purposes to give students in training an authentic context in which to practise their skills and become socialized to their career culture.

Generic skills

Many provincial departments of education, secondary schools and community colleges have been identifying cross-curricular skills, largely (but not exclusively) with an eye

to work preparation. This has been prompted by business pressures to make education more relevant.

These cross-curricular skills usually involve academic skills centred on thinking and problem solving; communication skills involving literacy, numeracy and computer competencies; and personal skills (more properly attitudes) such as teamwork, initiative, social relations, entrepreneurship and a positive attitude to lifelong learning. Some of these skills like problem solving and ability to read and write are embedded in specific curriculum areas such as mathematics, social sciences and languages; others such as computer competencies may involve many areas of the curriculum. Still others, like social relations and attitudes toward learning, are more rooted in the culture of the school, how teaching and learning are organized and the extra-curricular activities of the school.

It is not always clear what these "generic" skills really mean, what standards of performance should be expected, how and when they should be assessed, and how they are best taught – as independent elements or functions of other forms of learning. But they are widely recognized as being important.

HRDC is researching the essential skills needed in many occupations in the Canadian economy. This research will help employers and trainers identify the generic skills that form the foundation for general and advanced occupational learning. Profiles of generic skills, based on the National Occupational Classification (NOC), can influence the learning system to smooth school-work transitions and enable increased mobility of labour. Prior learning assessment and recognition (PLAR) can also be used by employers to determine the competencies of their work forces in these generic skills.

In addition, HRDC is supporting the development of measurement instruments to measure skills and achievement through IALS, the International Lifeskills Survey (ILLS), TIMSS and SAIP.

Applied academics and tech-prep

There is growing recognition that, in the knowledge economy, the traditional distinctions between academic education and vocational training are beginning to dissolve. This is leading to an increase in the academic "content" of vocational programs (communication, scientific knowledge, thinking) and to a comparable interest in the applications of academic programs in such areas as reading for comprehension, providing clear written and oral instruction, applying mathematical and scientific principles to practical problems, and linking such areas as art and design, writing style and hypertext, economics and cost estimates, communication and marketing.

Some institutions are giving courses in "applied academics," special courses in English, second language, mathematics, social sciences, physical sciences and fine arts which deal with issues in various careers or career clusters such as computer technology, computer-aided design and industrial processes. These applied academic courses are usually given concurrently with skill courses. Another approach is "tech-prep," linking academic and career courses in senior secondary school with advanced courses in community colleges, involving joint planning by secondary and postsecondary staffs and often advance placement of secondary students in community college courses not normally available in high school.

Career information and counselling

It is widely recognized that young people beginning the first phase of transition from school to work need good, accurate, up-to-date, relevant and accessible information about career options – nature of the work, skills required, training programs and job prospects. This is especially important for students planning to move directly from secondary school to work, and for certain categories of students who may have limited knowledge of the job market or limited aspirations and initiative.

Career information is increasingly computerized through human resources centres and the job search facility on the HRDC Website. But many students also need individual counselling by professionals familiar with

their abilities and interests and with the job market. These may be guidance counsellors in schools, job counsellors in employment centres, or teachers and workers in different career fields.

Mentoring

Interest is increasing in providing mentors to young people, usually people outside the institution who can establish a personal bond with a young person, provide a role model, and give academic or career guidance and assistance. Many young people, especially those who are at risk, who come from dysfunctional or disadvantaged environments or who have special problems, have few opportunities to establish a one-on-one relationship with a mature and successful adult. Other young people may have special interests and gifts that require nurturing by someone like themselves. Mentoring is usually one of a cluster of services made available to students in a period of transition, especially toward the end of secondary school.

Apprenticeship in Canada

In Canada, the term "apprentice" usually refers to apprentices as defined under provincial and territorial acts and regulations governing the trades. Apprenticeship regulations establish minimum wages and working conditions and set training standards for what are called the designated trades. Apprenticeship training combines school and work. In some cases, apprentices receive credit for prior training and work experience.

From the mid-1960s to recently, the federal government paid classroom training costs, including income support. Employers provided employment and on-the-job training to apprentices and the respective provincial and territorial governments administered the program. With new federal-provincial labour market agreements, the federal role is shifting to the support of program infrastructure, such as standards, examinations, labour market information and support of national advisory bodies.

In 1995, the number of apprentices registered in these trades was about 130,000, down from 160,000 in 1990. Hundreds of different trades have been designated as apprenticed trades in one jurisdiction or another. Interprovincial standards have been established for 44 trades under the Interprovincial Standards Program.

In trades such as automobile mechanics or construction electricians, apprenticeship training is compulsory in most jurisdictions. In these jurisdictions, only licensed tradespeople and registered apprentices can work in these trades. While there are many designated trades, the bulk of apprenticeship training takes place in relatively few – principally, construction trades, mechanical and electrical industrial trades, hairdressing and baking.

The results of the National Apprenticed Trades Survey show very clearly that apprenticeship in Canada is not a school-to-work program for high school students in the manner of German apprenticeship. In Canada, the average time that lapses after leaving high school and registering as an apprentice is eight years. The most commonly given reason for this duration was that the respondents already had a good job before entering the program. Over one half of apprentices had three or more jobs before entering. In addition, the average age of an apprentice at the time of entering the program was 27. Over 45 percent had finished high school and 11 percent had finished a community college program.

Some jurisdictions have linked high school directly with formal apprenticeship. Ontario established the School-to-Work Apprenticeship Program, and Alberta, the Registered Apprenticeship Program. Although successful, these programs comprise only a small portion of apprenticeship. High school students face competition from more experienced and more highly educated workers. The apprenticeship wages in Canada are high in comparison to Germany. It is also not clear that high schools have the flexibility to accommodate the hours of work required in apprenticeship.[21]

[21] Stoll and Baignee, *The National Apprenticed Trades Survey*, 1997.

Observations

- Many resources and services are available for those in school-work transitions.
- Many stakeholders are involved: governments, parents, business, the community, the education system and education institutions.
- The importance and problematic nature of school-work transitions is widely recognized, especially for the young and those with limited educational attainment.
- There is no single approach that has been identified as both necessary and sufficient to deal with the challenges young people face.
- Because there are many variations of transition, important regional and sector differences in employment, and a great diversity in the needs and aspirations of young people, a variety of approaches is necessary.
- A stronger knowledge base, including more and better research and evaluation, would help build policies and practices.

Issues and Concerns

There is much we need to know about the processes of transitions and about the effectiveness of our programs to improve the processes. A study by the Social Research and Demonstration Corporation (SRDC) points out that we do not know very much about the effectiveness of transition programs and services and their effects on the working life of their clients.[22]

There are many unanswered questions which researchers and policy makers must address if policies and practices for transitions are to be enlightened and effective – questions about the educational and labour market choice of Canadian youth, about employment patterns of youth and their outcomes, about the individual consequences of unsuccessful school-work transitions, about employability skills and how they are acquired, and about the effectiveness of the variety of new school-based programs intended to improve school-work transitions for youth.[23]

Questions are also being asked about possible links between problems or risk factors in early childhood (e.g. single-parent family, low socio-economic status, parental attitude to education, elementary school failure), the chances of leaving school before graduating, and a successful transition to the world of work.

[22] Social Research and Demonstration Corporation, *Evaluating the Effectiveness of Employment-related Programs and Services for Youth*, 1996.
[23] Krahn, *School-Work Transitions*, 1996.

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2. TRANSITION IN NOVA SCOTIA – CASE STUDY

Context

Like many other jurisdictions, Nova Scotia is facing significant changes in its economy with a decline in traditional manufacturing, processing and resource sector jobs. For more than 200 years, the sea has played an integral role in the economy of the province. It was the abundant fishery that drew settlers to the area. Nova Scotia is still the leading fishing province in Canada, with an annual landed value of approximately $450 million, equating to a market value of some $800 million. The industry is the main employer in many regions of the province and drives the economies of our coastal communities.

Agri-food products from Nova Scotia farms are exported to over 60 countries, as well as the other Canadian provinces. Nova Scotia's highly specialized commercial agriculture industry has an annual farm gate value of over $350 million. Total employment in agriculture, including operator, family and hired labour, is the equivalent of 7,000 person years.

The forestry industry provides more than 6,000 direct jobs and employs an estimated 13,000 indirectly. Forestry-related shipments total approximately $700 million annually, accounting for about 24 percent of the province's exports to international destinations.

Nova Scotia's varied mineral and energy resources, and related manufacturing, provide a substantial input to the province's economy. Exploration for oil and gas has been diligently pursued for a number of years in both the offshore and onshore areas of the province. More than 120 offshore wells have been drilled since 1967, resulting in considerable oil reserves concentrated in the vicinity of Sable Island.

Tourism has a significant economic impact on the province's economy. Total tourism receipts in 1993 exceeded $800 million, with the industry generating over 33,000 direct and spin-off jobs.

Nova Scotia also serves as an important transportation and trade gateway. The Port of Halifax, with its deep-water harbour and two modern container terminals, is capable of accommodating the largest container ships which regularly ply between the port and Europe, the Mediterranean, the Middle East, the Caribbean and Australia.

Nova Scotia is rapidly becoming a national and international leader in information technology. Over 100 companies and more than 6,000 people are employed in computer hardware and software production, marine communications, geomatics and telecommunications. Total revenue from this sector exceeded $750 million in 1993, with an average annual growth rate of 20 percent. In 1996, Nova Scotians had the highest per capita use of the Internet in North America, with Internet access available in most communities across the province.

More than 2,000 manufacturers, many located in the almost 50 industrial parks across the province, produce everything from aircraft and automobile parts, electrical and electronic equipment, to carpeting, chemicals and sport and leisure equipment.

Employment

The largest employment occurs in the community, business and personal services sector (112,100 in 1993) with the public administration sector as the next largest employer (63,900 in 1993). Retail trade (52,200) and manufacturing (39,500) are also large employers. The largest non-government employers are in manufacturing, banking, insurance, power and communication. Personal income per capita in 1996 was $19,097 while the average household income was $38,317. Table 4 outlines the labour force and employment statistics for 1997.

Age and Employment

The Nova Scotia economy, as in other parts of Canada, exhibits both seasonal fluctuations and long-term trends in employment. The province's unemployment rates for four age categories (as well as the overall rate) for the past 11 years, as calculated by Statistics

Table 4: Nova Scotia Employment Statistics, 1997

Population	735,500
Labour force	440,600
Employed	385,000
Unemployed	55,600
Unemployment rate	12.6%
Participation rate	59.9%

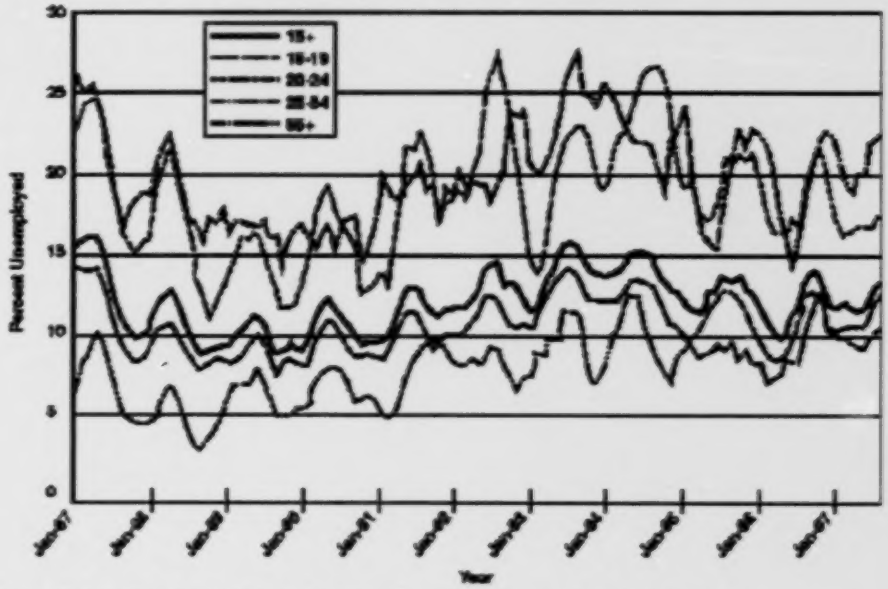
Adapted from: Nova Scotia Facts at a Glance, *1997, Department of Finance, Statistics Division.*

Canada, can be found in Figure 1. The dark trend line gives the overall unemployment rate, revealing the seasonal fluctuations and long-term trends. Seasonally, as expected, unemployment is highest in the winter and lowest in the summer.

The long-term unemployment trends are demarcated by three time periods. The first time period, from 1987 to 1990, shows a declining unemployment rate, with summer rates dropping below 10 percent. From that point until the spring of 1994, the unemployment rate kept climbing, surpassing 15 percent in the spring of 1993. Since then, the unemployment rate has again been declining, but not to the levels found in 1989 and 1990. The national unemployment rates for 1989-90 were 7.5 and 8.1 percent, respectively, and the provincial unemployment rates for the same period were 9.9 and 10.6 percent, respectively.

It is well known that the employment context for youth has not been very positive recently. As Figure 1 shows, youth unemployment rates are consistently higher than adult rates. The unemployment rates for the four age groups fall consistently either above (the youth groups) or below (the adult groups) this overall rate. There is not a single exception to this pattern. The employment rates for both the 15- to 19-year-olds and 20- to 24-year-olds are always higher than the average, and the unemployment rates for adults is always lower than the average.

Figure 1: Nova Scotia Unemployment Rates, 1987-1997, by Age Group



Source: Statistics Canada unpublished Labour Force Survey data (three-month moving averages).

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A second point to notice is the variability of youth unemployment rates. The valleys and the peaks fluctuate substantially more than those of their adult counterparts. Such fluctuation may represent another form of youth vulnerability in the labour market: they are the last hired and first fired. The fluctuations in youth unemployment suggest that their employment is frequently seasonal and short term.

In short, the labour market picture for young people indicates high unemployment rates and low security.

Region and Employment

The employment prospects in Nova Scotia also vary by region. For example, proximity to Halifax, the capital of the province and its largest city, increases employment possibilities.

A comparison of youth unemployment rates in the four reporting sub-regions in which the Nova Scotia School-to-Work project is located reveals clearly the disparate youth employment opportunities. This is outlined in more detail under the "School-to-Work Transition Research Project" section.

Institutional Framework

In Nova Scotia, free public education through the elementary/secondary school system is offered to all students, without exception, from ages 5 to 21. Education is compulsory between the ages of 6 and 16. The province has six Anglophone regional school boards and one provincial francophone school board. There are 472 schools in the province, with a school population of 163,941 from primary to Grade 12.

The Nova Scotia Community College system comprises 14 campuses located throughout the province. Community colleges provide education and training programs in the trades, technical, technological and applied arts fields. In addition, the Collège de l'Acadie provides a technology-based delivery system serving French-speaking college students throughout the province.

The province's 11 universities offer degrees in many disciplines; specialized training is available at a number of the province's institutions. Nova Scotia has also been acknowledged as a leader in offshore and oceanographic research, due to the work conducted at the Nova Scotia Research Foundation, Dalhousie University and the Bedford Institute of Oceanography. Worldwide recognition has also been focused on the medical advances achieved in Nova Scotia, particularly multi-organ transplants and cardiology research.

Clarification of the Transition Concept

The Nova Scotia Department of Education and Culture's vision of an educated person is that of a competent, confident learner able to think critically and participate fully in a democratic society and in a lifetime of meaningful work. A sound education provided in partnership with the home and the community forms the basis for students to become healthy and caring persons, having a respect for self and others and a desire to contribute to society as productive citizens.

The Department recognizes that fundamental changes are occurring in the world. The economy is becoming more diversified and is placing a greater emphasis on information-based enterprises, global competitiveness and sustainable development. To function successfully in this changing environment, all children in Nova Scotia need a broad-based, quality education which prepares them for a changing environment.

The challenge of education for the 1990s and into the next century is to offer a school experience that will provide students with opportunities to develop those understandings, skills and attitudes necessary to develop into lifelong learners capable of identifying and solving problems and dealing with change. To respond to this, a new transition framework needs to be developed. The approach must be flexible enough to address the needs of students as they progress through the school system and ensure that they meet core educational requirements. At the same time, it must prepare them for ongoing changes in the workplace.

Transition programs do not necessarily lead directly to employment. While providing an orientation to the workplace and some specific job-related skills, they also may set the stage for further education and training which will follow Grade 12 (considered to be the end of the public school education program). Public school education in Nova Scotia has two major goals: to help all students develop to their full potential cognitively, affectively, physically and socially; and to help all students acquire the knowledge, attitudes and skills necessary for them to continue as thinking, learning, physically active, valued members of society. The school-to-work component of this program assists students to make informed decisions about their career future and to take the next step in acquiring the knowledge and skills they will require in the workplace.

Transition programs allow students to enhance and apply, in real-life contexts, knowledge, skills and attitudes acquired through course work in school. They improve students' understanding of employment requirements and the links between the skills and knowledge they are acquiring in school and their future plans. These experiences also help students to develop employability skills, including academic, personal management and teamwork skills in addition to specific occupational skills and labour market knowledge and understanding. This is particularly beneficial in today's rapidly changing economy.

Concerns about the Transition Process and Outcomes

Over the past 15 years, some dramatic changes have occurred in both the population and the flow through the education system. As the first row of Table 5 shows, 163,941 students in Nova Scotia were enrolled in 461 schools and were taught by 9,384.3 full-time equivalent teachers in the 1996-97 school year. Over the past decade and a half, each of these figures has shown a steady decline. Between 1982 and 1996, enrolments dropped by approximately 9 percent, schools by approximately 21 percent and full-time equivalent teachers by 13.5 percent.

Between 1982 and 1995, about 20 percent more students enrolled in Grade 12 and graduated. Currently, about three in every four eligible students graduate. The rate of withdrawal from high school has shown a very modest increase from about 9 percent to about 11 percent over the past decade and a half. There are two dips in the rates, one occurring in 1986-87, the other in 1991-92. These are two of the years in which the Nova Scotia economy was in a downturn. This suggests that to some extent school leaving is a function of the economy, with higher withdrawal rates during periods of economic recovery and lower withdrawal rates during economic stagnation. It should also be noted that some of those who initially withdraw will return at a later date to complete secondary education.[1]

The increase in graduation rates is also reflected in the fact that the vast majority of students stay in school until Grade 12 or approximately age 18, despite compulsory school age being 16. The traditional secondary education system was designed to meet the needs of a smaller number of students who stayed in school through Grade 12, specifically because they intended to go on to postsecondary education. Academic courses were provided which specifically met university and college entrance requirements. However, the needs of other students who go directly to the workplace or to job-training programs have not been as well served in secondary schools. In addition, the changing needs of the workplace required that both postsecondary bound students and those bound directly for the workplace receive better information about career options and new knowledge and skills related to a changing economy.

[1] The 1995 School Leavers Follow up Survey shows that among youth who were high school leavers as of 1991, 25 percent returned to high school and had obtained their diploma by 1995.

Table 5: Selected Nova Scotia Educational Indicators, 1987-1997

Year	Enrolments	No. of Schools	FTE* Teachers	Pupil: Teacher Ratio	Class Size (senior high)	Withdrawal	Graduation Rate
1996-97	163,941	461	9,384.3	17.5	24.0		
1995-96	164,020	472	9,356.1	17.5	24.0	10.9	74.9
1994-95	164,433	473	9,623.5	17.1	23.3	11.9	76.1
1993-94	165,890	479	10,120.7	16.4	23.6	12.6	75.6
1992-93	166,112	487	10,099.6	16.4	23.6	12.3	73.2
1991-92	165,424	492	10,372.3	15.9	22.8	9.7	70.6
1990-91	165,739	500	10,417.4	15.9	22.5	12.1	67.0
1989-90	166,279	519	10,611.8	15.7	22.5	10.7	65.7
1988-89	167,596	529	10,590.4	15.8	22.6	11.1	64.8
1987-88	169,478	532	10,450.9	16.2	23.2	10.4	62.2

Source: Nova Scotia Department of Education and Culture.
**FTE - full-time equivalent.*

Changing Expectations and Objectives

In 1996, the Department of Education and Culture initiated discussions around possible changes to the *Public School Program*. The general consensus was that the program and course offerings in schools addressed the needs of students for strong academic courses which meet university and college entrance requirements. However, the needs of other students going directly to the workplace or other postsecondary education destinations were not so well served. The issue that faced the Department was how to enhance the senior high school program to ensure that the range of programming, strategies and structures provided the diversity of experience necessary to accommodate the learning needs of all senior high students.

A particular challenge is to achieve the right balance between course offerings that enable students to meet compulsory credit requirements for graduation and course options that allow students to individualize their programs to reflect their interests, needs, abilities, aptitudes and learning goals. It is also important that course options be available which will invite early school leavers to return to school and that these options support them in their efforts to complete public school education.

To respond, the Department needed to develop *expanded course options* that would provide a framework for students to apply the knowledge, skills and attitudes they acquired in academic studies to relevant home, workplace and other community contexts. Some of this programming needed to be designed to help students learn the practical skills they need for meaningful participation in the community and the workplace. Some needed to provide opportunities for all students to gain the knowledge, skills and attitudes they will need to meet the demands of a highly complex world of work and lifelong learning.

The Department is currently working directly with school boards in developing and implementing a number of new courses which will appeal to a wide variety of high school students and assist them in making connections among school, the community and the workplace. Some courses under development are as diverse as Marine Physiography, Entrepreneurship, Visual Arts, Tourism, Design in Landscaping and Robotics and are characterized by the following features:

- a strong applied focus with an emphasis on integrating, applying and reinforcing the knowledge, skills and attitudes developed in other courses;
- a strong focus on refining career-planning skills with a futures orientation which invites students to explore a range of pathways from school;

- a strong connection to labour market opportunities with a focus on enhancing students' employability skills – academic skills, social and teamwork skills, technological skills, and personal skills such as responsibility, adaptability and positive attitudes;
- a strong connection with the community and workplace with a focus on using real-world community and workplace problems and situations as practical contexts for the application of knowledge and skills and for further learning;
- a strong focus on "hands-on" learning experiences, including experience with a range of technologies; and
- a flexible design framework comprising learning modules, each involving 25 to 30 hours of scheduled time (four learning modules constituting a full credit and two constituting a 1/2 credit).

As a complement to these new courses, the Department has also initiated a number of *community-based education initiatives*. These permit the expansion of learning opportunities for students by bringing the community into the school and placing students in the community as part of their studies. Community-based education in Nova Scotia includes cooperative education, school-to-work transition, work experience and job-shadowing programs.

Co-operative education refers to community-based experiential learning undertaken by a senior high school student taken in conjunction with a high school course. It integrates community-based experiences with in-school instruction in a provincial or locally developed and approved course.

School-to-work transition refers to community-based experiential learning undertaken by a senior high school student which includes in-school instruction combined with a community-based experience. The program develops outcomes related to skills which are transferable from one occupation to another but not specific to a set of skills or knowledge taught in schools.

Work experience is defined as community-based experiential learning of either long- or short-term duration, typically 10 to 50 hours, which is integrated with an approved course undertaken by a junior or senior high school student.

Job shadowing refers to community-based experiential learning of approximately one-day duration. It can be part of a student's program at the junior and senior high level or at the elementary level if, in the opinion of the school, the student could benefit from the experience. Job shadowing is intended to give students experience in the community to help them become familiar with the nature of the workplace and occupations within it.

In all cases, these programs are designed to complement and enhance more traditional academic-oriented program offerings in schools. In addition, the Department is concerned that students have the flexibility to move among the options and not be streamed into one option with no possibility of changing.

School-to-Work Transition Research Project

In January 1994, the Nova Scotia Department of Education and Culture, in association with the Innovations Program of Human Resources Development Canada (HRDC) and the Atlantic Provinces Economic Council, organized a workshop to examine issues in school-to-work transition. Representatives from school boards and directors of community colleges also participated.

Participants agreed that the changing environment of employment, education and training required rethinking of the transition that takes place for students leaving school and entering the work force. Transformation in the workplace due to technology and business restructuring have created a barrier in the traditional process of completing school and beginning work. The changing economy and the decline in traditional manufacturing, processing and resource sector jobs have resulted in changing training needs.

To respond to these changes, strong support for the creation of the *Nova Scotia*

School-to-Work Transition (NSSWT) Research Project emerged. Focus group meetings were held in February 1995 in which program objectives, intervention parameters and target student populations were defined. In April 1995, all school boards were invited to submit a proposal to participate in the project.

Research Project Characteristics

The NSSWT research project was designed to develop and test six different school-to-work transition interventions as a preliminary step to creating and implementing a properly validated, feasible and cost-effective school-to-work transition program. The program is intended to facilitate the transition of high school graduates to postsecondary education or the labour market, provide skills training, help high school students make better educational and employment choices and link workplace with appropriate education and training. The program, with its six different interventions, combines classroom education (in-school component) and work experience (out-of-school component).

To be eligible to participate in the program, high school students were expected to graduate within two years (i.e. high school students in Grade 11). They also had to be enrolled in a high school program which leads to a Nova Scotia high school completion certificate and qualifies them for entrance into postsecondary institutions (e.g. community colleges or universities). They were required to be mature enough to accept the level of responsibility required in their work placement and be capable of the heavier workload which would be involved. The participants were also required to be 16 years of age by the time their work placement began.

A wide variety of students qualified for the program, including those in the middle range of academic performance and those with good academic standing. It was recognized that some of those who were not performing as well at school might nevertheless benefit from the program.

Each of the six sites had students participating in the program and students serving as a control/comparison group. Students in the program completed surveys and questionnaires, participated in an in-school course component of a minimum of 20 hours, and completed a minimum of 100 hours' work experience. Students in the control/comparison group completed similar questionnaires but did not participate in the in-school or work experience components. All sites designed their programs around a common set of objectives and model parameters. The target group of student participants had similar characteristics from site to site.

The differences among sites are in how they implemented the programs.

- Cape Breton Memorial High school students take the course component during noon hour and the work experience after school and frequently during summer vacation.
- In the Halifax region, the four participating high schools take the in-school component together outside the school setting and the work experience during weekends and vacation days.
- In Chignecto Central, Pictou District students from the seven high schools meet on Saturdays at the board office for a full-day workshop and work experience takes place during the summer vacation.
- At the Cobequid Education Centre in Truro, the program takes place during regular class time. Work experience usually takes place during the school day.
- In Amherst High, students take the in-school component during the noon break and all work experience takes place during summer vacation.
- At Yarmouth Memorial High, the program operates outside the school setting. The in-school component is given during evening sessions and work experience takes place after school hours and during summer vacation.

Research Design

The research project adhered to an experimental design with random assignment of applicants where possible and to a quasi-

experimental design otherwise. This means that the results achieved by students participating in the program (participant group) can validly be compared to the results obtained by students not participating in the program but who have similar characteristics (control/comparison group). All students in the participant group were selected from the pool of eligible students who had expressed interest in the program and filled in a registration form.

The research project tracked two cohorts of between 250 and 300 students at the beginning of Grade 11. The first cohort of students was tracked for three years (i.e. from the beginning of Grade 11 in 1995-96, through Grade 12 in 1996-97 and through 1997-98) when the students either entered postsecondary education or the labour market. The second cohort of students was tracked for two years (i.e. from the beginning of Grade 11 in 1996-97 through Grade 12 in 1997-98). Both the control/comparison and the experimental students filled out questionnaires at the beginning of the project and will do so again at the end of the tracking period. Parents of the participating students also completed questionnaires.

A training plan was individually tailored to each student's work placement. The student's job supervisor assessed the student's progress in the skills required for that job. To assess the development of employability skills, various tests that measure such skills were administered to the participant group and to the control/comparison group at the start of the NSSWT program and again at the end of the program. The IALS scales, as well as several of the WorkKeys tests developed by American College Testing, were chosen to tap generic work skills.

Case studies at each of the six sites provided the contextual information necessary to assess the different interventions.

Interim Findings from the Research Project

Economic, Educational and School Site Contexts of the Nova Scotia School-to-Work Transition Research Project

Youth unemployment is high, about double the adult rate, indicating a clear need for interventions such as the NSSWT program that increase the employability of youth.

Youth unemployment is highly variable, suggesting a particular vulnerability to fluctuations in the economic climate.

Youth unemployment is regionally diverse, being the highest in Cape Breton and the lowest in the Halifax region. This may indicate the need for different interventions in different regions, or a higher priority of intervention in some regions.

The types of jobs most frequently listed in HRDC employment centres are not the types of jobs that the young adults in the NSSWT program desire. To obtain jobs with potential, youth need to develop more sophisticated job search strategies. The NSSWT program is beginning to serve that need through its in-school intervention.

The highest student withdrawal rates from school occur in Grade 10. This suggests that to be most effective, school-to-work transition programs should start one year earlier than specified in the program parameters for the NSSWT program (in Grade 10 rather than Grade 11).

In all school years, males were substantially more likely than females to withdraw from school. This makes young males more at risk than young females of not being suitably prepared for today's labour market. Because adolescent males were significantly less likely than adolescent females to express interest in participation in the NSSWT program, it would be worthwhile to develop promotions of school-to-work programs specifically geared to attracting young males.

Graduation rates in Nova Scotia high schools have increased steadily from under 55 percent in 1981-82 to about 75 percent in

recent years. This increase has now levelled off, suggesting that graduation rates have reached their upper limit. Transition programs such as the NSSWT may provide the necessary stimulant for some to complete high school. The participating schools have shown an above-average *increase* in graduation rates.

Schools participating in the NSSWT research project were representative of provincial schools with respect to such characteristics as distribution of class size, student retention rates and gender. The graduation rate in participating schools tended to be somewhat lower (between 2% and 6%) than the provincial average. However, none of the participating schools had consistently below average graduation rates.

Analysis of Employer and Supervisor's Questionnaires, 1995 Cohort

There was a wide range of organizations, large and small, old and new, in the public and private sector which took students for the work experience component of the program. Most employers had heard about the program from the project coordinators, and participated because they agreed with the program's philosophy. It is clearly important to maintain the active role of the project coordinators and a list of sympathetic employers.

Specifically, employers indicated that it is important to have close links between the school and work organizations, with the two cooperating rather than one dominating the other.

Both employers and supervisors listed several benefits to their organizations; only a small minority saw no such benefits. The types of benefits noted were getting specific tasks accomplished, the infusion of enthusiasm and new blood, recruitment possibilities, increased visibility for their organization, a chance to help students and the creation of links with the school.

Supervisors emphasized the importance of oral communication skills and teamwork as skills the students should bring to, and develop, on the job.

Few said that the student workers will be hired directly, but the work experience did provide a possibility of future ongoing employment for the students in the program. Most were pleased with their participation and said they would hire another student under the program.

Participants' Family and Background Characteristics

Parents supported the NSSWT program. Only about one in five was neutral, and none discouraged their child from participating. Parents wanted their child to not make a hasty or uninformed decision about his or her career, and exploration of career options under the auspices of a structured school-to-work program made sense to them.

The NSSWT program was successful in attracting students from diverse socio-economic backgrounds. The fathers were mainly in three types of occupation: skilled crafts and trades, semi-skilled manual occupations and middle management. The mothers were also in three types: semi-skilled clerical, sales and service; semi-professionals; and skilled clerical, sales and service.

The socio-economic background of participants and control/comparison students were sufficiently similar not to be considered a contaminating factor in the analyses of the NSSWT program's effectiveness.

Parents had high educational aims for their children. At least two thirds of them preferred their child to have at least some university education, and about a third preferred that their child obtain at least a master's degree. At the same time, many parents recognized they cannot underwrite the high cost of university education and therefore expected their son or daughter to work part time. Parents were more certain than their children that higher education is essential, but they were more open to non-university forms of education.

Students attracted to the NSSWT program came from households in which the parents felt less clear about what post-high school paths were preferable for their child to take. This suggests that students who most need to

participate in the NSSWT program, given the lack of clear information available from the parents, are those who are attracted to the program.

Despite the persistent high youth unemployment rates, parents in the NSSWT research project remained relatively optimistic about their child's future. But there are clear signs of concern about the economic picture. More than one-quarter considered the odds of a full-time job for their children no better than even, and about four in ten gave the same odds for their children owning a home.

Only about one third of parents and children had compatible residential location preferences. The farther away the residential location, the more likely it was for students to endorse the location more than the parents. The opposite was true for parents. Given the youth employment picture in Nova Scotia, this is likely to generate some friction within the families.

Characteristics of Applicants to the NSSWT Program

Students attracted to the program are academically average or better. Approximately equal numbers of average and above average students applied to the program. At the same time, the minimum and maximum scores indicated that some of the students were struggling academically, while others excelled, at least in some subjects. The 1996 cohort included some applicants who were functioning below their potential in Grade 9 but improved by Grade 10.

A strong sense of personal ability characterized the young people. Most applicants believed they were able to do things as well as most other people; they rejected the notion that they have little control over things that happen to them; they felt that when they make plans, they almost certainly can accomplish them; and they did not believe they have insufficient control over the direction their life is taking.

Students attracted to the NSSWT program were academically ambitious. Only one in twenty did not intend to pursue formal education after high school. One-quarter expected to go beyond a bachelor's undergraduate degree, aiming their sights on a master's or doctorate. Given that jobs with potential will increasingly require more than a high school level of education, the academic aspirations reported here are concordant with likely job requirements.

Applicants rated themselves as average or higher on generic work skills. At the same time, these students left substantial room for improvement. Their self-appraisal was lowest with respect to problem-solving and numeracy skills, and highest with the ability to work as part of a team.

Students recognized that pursuing education would be done in conjunction with at least part-time work. Less than one in five of those planning to attend university full time did not plan to work during university.

Substantial consensus characterized what job attributes these students desired. At least three in four students judged it very important that future jobs fit their interest, are enjoyable, secure and give them a feeling of accomplishment.

Few dramatic differences in student attributes were found between the six sites. In general, the backgrounds, academic performance, aspirations, expected lifestyles, values and beliefs are quite similar.

Analysis of Participants' First-Year Experiences

Participants enjoyed being involved in the NSSWT program. The program met their expectations and the majority would recommend it to others. They felt it had a positive effect on many outcomes, such as the decision about what to do after high school, development of employment-relevant skills, attitude to school and their self-confidence.

Participants were satisfied with the in-school component of the program. On every aspect, participants were more likely to express the highest level of satisfaction than the lowest level of satisfaction. Many could find no fault with the in-school component.

Four themes captured what the students saw as the main advantage of the in-school component: knowledge acquisition, skill acquisition, general work force preparation and decision making for the future. The distribution of these advantages was not site-specific; that is, the same advantages were mentioned in each of the six sites and in roughly the same mix.

A spill-over effect characterized participants' reaction to the program; that is, if students had a good experience in one aspect of the program, this seems to spill over to their feelings about other aspects.

Time pressure and conflict with school activities were the main disadvantages of the in-school component. These disadvantages were linked to the different sites, so that in some sites it was missing classes, in others, time constraints, and in still others, it was losing the lunch hour.

Participants were successfully placed in a large variety of jobs. Most work experience placements were in settings in which good work habits and generic job skills could be practised.

Participants consistently rated highly all aspects of the work experience. They particularly liked the high level of employer support. About a quarter of the participants saw no disadvantages for the out-of-school component; about the same number felt that it interfered with schoolwork. The only other aspect on which a substantial minority of participants expressed dissatisfaction was the wage or payment they received.

The tasks assigned to participants by the employer were key in determining satisfaction with the out-of-school component. It seems that student perception of employer support for the NSSWT program came from being assigned tasks that were more meaningful than they had expected to receive.

The out-of-school component provided work experience and a better understanding of the world of work. From the participants' perspective, these were the main advantages of the out-of-school component. What the students viewed as the advantages are consonant with the objectives of the NSSWT program. The extrinsic rewards of getting a job and getting paid were mentioned by only a handful of participants.

From an academic achievement point of view, the NSSWT program particularly benefited the average and somewhat below average participant. Such students achieved higher marks in Grade 11 compared to their counterparts in the control/comparison group. Participation in the program seemed to interfere somewhat with the academic performance of students whose Grade 10 marks were outstanding.

Conclusion

The results to date indicate that the NSSWT program is addressing the facilitation of the transition of students from school to work or postsecondary institutions (e.g. community colleges or universities), the development of generic and job-specific skills and the provision of appropriate skills training in "jobs with potential." The students who are attracted are precisely the kind for whom the program was intended – those students in the middle range of academic performance and those with good academic standing. These students stand to benefit from the program, and their attitudes and beliefs, although overly optimistic, are likely to approach the high goals they have set.

3. TRANSITION IN QUEBEC – CASE STUDY

Context

With an area of 1 667 926 km^2, Quebec is about three times the size of France and five times the size of Japan. Its population of over seven million is concentrated in the southern part of the province, where Montréal, the largest city, and Québec City, the capital, are located.

Approximately 80 percent of the population is French speaking. The English-speaking community accounts for 9 percent of the population. French is the official language.

In terms of government jurisdictions, constitutional powers are shared between the federal government, based in Ottawa, and the Government of Québec, based in Québec City. This arrangement provides for exclusive powers on the part of each level of government as well as concurrent powers.

Since the turn of the century, the base of Quebec's economy has shifted from natural resources and raw materials to manufactured products and services. As a result of rapid technological advances, Quebec has become a competitive world-class player in a number of industries. Some of these cutting-edge sectors are hydroelectricity, telecommunications, biotechnology, aerospace technology, pharmaceuticals and software design.

Quebec has a skilled labour force. Approximately 50 percent of the active population has a postsecondary education. The service industry employs around 75 percent of workers, and the manufacturing sector, a little over 20 percent of wage earners.

The labour market in Quebec has been characterized by high unemployment for the last two decades. Unemployment has not dropped below 9 percent in the last 20 years or so, but has remained stable at between 11 and 12 percent, due mainly to the economic slowdown.

The average rate of economic growth has gradually fallen from 5.5 percent in the 1960s, to 2.4 percent in the 1980s, to 1.1 percent in the first half of the 1990s. Quebec is certainly not alone in experiencing this marked slump, for slowed growth is a general trend in all OECD countries. However, in Quebec, as in Canada and North America in general, the rising unemployment trend started in the mid-1950s, long before the oil shortages of the 1970s.

A comparison of unemployment patterns in Quebec and Canada shows that, although unemployment is consistently higher in Quebec than in Canada by about 1 or 2 percentage points, the overall situation is the same: unemployment has been high for several years.

Furthermore, in Quebec, as in Canada and the United States, the rate of flow into unemployment is higher than in European Community countries, but long-term unemployment is lower. In other words, although more workers lose their jobs, they are jobless for shorter periods of time.

Differences in the curves showing the correlation between unemployment and gender are due mainly to the gradual entry of women into the labour market since the end of the Second World War. During the 1970s, the unemployment rate for women, usually lower than that for men, rose above the men's level. Since the early 1990s, the unemployment rate for women has again been lower than that for men, but only slightly so. In 1991, 12.5 percent of men were unemployed, compared with 11.3 percent of women. In 1995, 11.7 percent of men were unemployed, compared with 10.8 percent of women.

Youth unemployment in Quebec is significantly higher than that for adults. In 1986, the overall unemployment rate in Quebec was 11 percent, but the unemployment rate for the 15 to 24 age group was 16.7 percent. Nine years later, in 1995, these rates had risen slightly to 11.3 percent and 16.8 percent, respectively. The gap between the two has been relatively stable for more than a decade, despite the 15 to 24 age group shrinking from 1,120,600 in 1986 to 974,500 in 1995. During the same period, Quebec's total population rose from 6,733,800 to 7,334,200.

When the economy slows down, employment tends to become more uncertain. This is

especially true for newly created jobs, and mainly affects new labour force entrants (i.e. young people). However, in Quebec, youth stay unemployed on average for much shorter periods than older workers. In 1995, for example, the duration of unemployment was 17 weeks for the 15 to 24 age group, compared with 36 weeks for the 45 to 64 age group.

The rise in part-time employment is a good indicator of the uncertainty of employment when unemployment is high. Between May 1994 and May 1996, there was a significant shift toward part-time employment in Quebec, with 23,100 more youth in the 15 to 29 age group taking up part-time jobs (12,700 in the 15 to 24 age group). The part-time share of employment among youth rose to 31.4 percent (45.6% for the 15-24 age group).

Declining unionization is another indicator of the growing uncertainty of employment and of working conditions. In 1991, 48.5 percent of workers were unionized. By 1995, this percentage had dropped to 41.9 percent. The percentage of workers being paid the minimum wage set by law more than doubled between 1986 and 1992, rising from 3.6 to 7.5 percent. In the same time period, the percentage of employers paying their workers the minimum wage rose from 15.5 to 25.8 percent.[1]

In 1986, there were a total of 155,000 businesses in Quebec. In 1994, this number had increased by 16,327 (10.5%) to 171,327. In the service industry alone, there were 116,310 businesses in 1986; in 1994, there were 129,850, or 13,540 more (11.6%).

This shift to the service industry has created a greater demand for more highly educated workers. It should be noted that unemployment is significantly lower among more educated workers. In 1986, 12.8 percent of early high school leavers were unemployed, compared with 6.1 percent of university graduates. Nine years later, in 1995, the gap between these two groups had grown. Their unemployment rates were 16.9 percent and 5.9 percent, respectively. "The labour market is sending out clearer and clearer signals which reflect the requirements of a technological revolution that is about to shift into high gear...Technological innovation affects all sectors of economic activity, given the widespread use of the new information technologies. That is why the greater demand for more highly skilled workers is a major trend."[2]

However, while there is a demand for ever more highly educated workers, the jobs available do not necessarily correlate with this demand. Getting into the occupational subgroups likely to offer the best employment growth rates sometimes requires specific training, but not necessarily postsecondary training, as shown in a 1995 report on occupations in Quebec by the Société québécoise de développement de la main-d'œuvre (SQDM).[3]

The oversupply of labour means that employers can favour highly educated workers even if the jobs being filled do not necessarily require a high level of education. The consequences of this imbalance between the labour supply and the opportunities offered by industry are a trend toward overqualification and a devaluation of academic credentials, as evidenced by the fact that diplomas secure fewer advantages than before (e.g. jobs, wages, benefits).

Institutional Framework

Exclusive Jurisdiction over Education

Under the *Constitution Act, 1867*, Quebec, like the other provinces, has full jurisdiction in the area of education. In other words, the education system is administered by the Quebec government. More specifically, it is the responsibility of the person appointed as Minister of Education who, in this capacity, heads the ministère de l'Éducation, which was established in 1964.

The Minister of Education is responsible for determining the nature of the educational services to be offered and the general framework

[1] For example, 74.1 percent of businesses in the lodging and food services industry and 34.0 percent of businesses in the retail industry were paying the minimum wage in 1995, compared with 60.7 percent and 24.6 percent, respectively, in 1986. It should be noted that these two industries are part of the largest sector of the economy, the service industry.

[2] Société québécoise de développement de la main-d'œuvre, *Analyse du chômage et de l'emploi au Québec*, p. 41. [Translation]

[3] *Les professions au Québec. Perspectives pour 1997 et caractéristiques des emplois.*

under which they are to be organized. The Minister sees that the services delivered at the various levels of the education system are consistent with the public's needs and with Quebec's socio-economic development.[4]

The Education System

Quebec's education system consists of four levels: elementary school, secondary school, college and university.[5] Children are admitted to elementary school at the age of six, generally after having attended full-day kindergarten for five-year-olds the year before. Some children from disadvantaged areas have access to half-day kindergarten for four-year-olds. Elementary school lasts six years; secondary school, five. Students who successfully complete secondary studies are awarded a general education diploma leading to college (if they meet certain requirements) or to a vocational education program. The secondary school vocational diploma provides access to the labour market but may also, in certain situations, allow access to college.

School attendance is compulsory until the age of 16. At the elementary and secondary levels, French is the official language of instruction. Instruction in English is available mainly to children whose father or mother completed elementary schooling in English in Canada. Approximately 10 percent of Quebec students are schooled in English.

Postsecondary education consists of college and university. Quebec's education system is different from other systems in that a college education is a requirement for admission to university. Public college education is provided by general and vocational colleges known as CÉGEPs (from the French, *collèges d'enseignement général et professionnel*). Like secondary school diplomas, college diplomas are awarded by the ministère de l'Éducation.

At the college level, students can choose between pre-university programs (two years) and technical programs (three years). Technical programs are mainly geared to the labour market, but may allow admission to university, if the students meet certain requirements. This level of college education, which is used as a gateway to university education, is particular to the Quebec system.

University education is divided into three levels of studies. The first leads to a bachelor's degree, generally after three years (four years in certain cases), the second to a master's degree, generally after two years, and the third to a doctoral degree (notably a PhD) after three years or so.

There are 10 universities in Quebec, one of which, the Université du Québec, offers courses in several regions of the province through a network of 11 constituent universities. In the fall of 1995, 238,053 students were enrolled in Quebec universities, 56 percent full time and 44 percent part time. Of these students, 120,958 (51%) were enrolled in bachelor's programs, 24,578 (10%) in master's programs, 9,174 (4%) in doctoral programs, and 83,343 (35%) in short programs (diploma, certificate or other program).

Public education is free from preschool to college. Students pay tuition at the university level only. However, other expenses, such as the cost of books and supplies, must be covered by the students or their parents. To remove financial obstacles, the ministère de l'Éducation administers its own student loans and bursaries program. Each year, more than 150,000 Quebecers are given the opportunity to pursue secondary or postsecondary studies through the Quebec Loans and Bursaries Program, one of the most generous in Canada and even North America. That is part of the reason why, in 1995-96, Quebec students owed on average $11,261 at the end of their studies, while students elsewhere in Canada owed between $17,000 and $25,000.

Vocational and Technical Education[6]

Secondary schools are responsible for vocational education. In certain cases, students may enrol in a vocational education program after the third year of secondary school. How-

[4] Ministère de l'Éducation. *Rapport annuel 1995-1996*, 1996, p. 9.

[5] See Appendix 1 for a diagram showing the structure of the Quebec education system.

[6] In Quebec, vocational education programs are offered at the secondary level, and technical programs at the college level.

ever, they have ready access to a wider range of programs after the fifth year of secondary school. For most of the students who enrol in these programs, vocational studies are an alternative to college.

A reorganization of the vocational and technical education sector is currently under way as a part of the education reform process initiated in 1995 with the Estates General on Education. One of the seven new directions charted as a part of this effort to renovate the education system consisted in intensifying the work already in progress to improve the delivery of vocational and technical education.

Providing better access to continuing education is another direction being pursued under the reform. Continuing education is essentially intended for adults who wish to complete or round out their initial education. In actual fact, the adult education sector is not only for adults but is also open to young people from the age of 16. Students under the age of 20 are usually recent leavers from the regular school system who have opted to return to school and finish their studies in the adult general education sector instead.

The educational services offered in the adult general education sector include or have included integration into community life, socio-vocational integration services, pre-employment training services, literacy services, French language-learning services, and vocational or postsecondary education preparation services.

Clarification of the Transition Concept

The transition from initial education to working life is a general concept that has evolved over time, mainly as a result of the changes which have affected the labour market. However, its evolution has also been shaped by social and demographic trends, such as the significantly smaller size of families, the massive influx of women into the labour market, the pursuit of ever higher studies by girls, greater access to education and the availability of adult education. It is not simply a matter of congruity between the education and production systems.

The transition to working life, or labour market integration, used to refer to an almost linear phenomenon which involved leaving school and, often at the same time, the family home, to start a job and married life. The transition happened very quickly, once and for all, with little chance of ever going back or starting over. Today, for many people, the transition happens over a decade or more, and features a combination of work and training. Full-time jobs are no longer the norm, as evidenced by the increasingly diverse types of employment statuses in the labour market.[7] "Labour market integration is no longer a simple and direct passage from the education system to the production system. It has become a complex process which features a mix of job search activities, employment, unemployment, training and inactivity over a period of time."[8]

Because the concept has evolved and refers to a process and not a specific moment in the life of a person, it is difficult to define. It has also become very hard to distinguish between transition to working life and job mobility. Making such a distinction implies being able to at least identify when the transition process ends. The concept of job mobility would then include all occupational changes occurring after the individual's entry into the labour force.

To date, all kinds of indicators have been used in Quebec to observe young adults' transition from school to work. The indicators used in follow-up surveys of graduates of secondary school vocational education programs and college technical programs focus on three main areas: employment situation, job search strategies and features of the job or jobs held by respondents. In these surveys, the emphasis is on labour force development, and on the transfer of learning from school to the workplace. A similar survey is conducted every two years among university graduates.[9]

These surveys define the transition from initial education to working life in terms of graduates' ability to secure a full- or part-time job and whether or not the job is related to their field of study. This definition also takes

[7] Baby, 1993; Gauthier and Mercier, 1994; Tremblay, 1994.
[8] Trottier, 1995, p. 15. [Translation]
[9] The results of these surveys are published by the ministère de l'Éducation, under the series title *Relance*.

into account the fact that respondents often work not by choice but by necessity (e.g. working part time after or during their studies or holding down two jobs) and likewise have no choice but to accept the salary normally paid for a given type of work. The discrepancies between men and women and between regions are also considered, as are other forms of non-standard employment such as self-employment. Generally, the most frequently used objective indicator is the youth unemployment rate, which although an essential measure of whether young people are integrating into the labour market, is insufficient when assessing the outcome of their transition to working life. There are very little data or research on the quality of the jobs created or held by graduates. To clarify the transition concept, a distinction should be made between two main types of jobs: those thought to be stimulating by those who hold them and which offer good conditions, and those often considered dead-end jobs with no security, no advancement opportunities and no status. These jobs do not allow their holders to construct or consolidate their identity as members of the labour force. Because these jobs offer no security or stability, it is more difficult for young people to make plans for the future. This supports the theory that the transition period between school and work is getting longer and longer, and cannot be reduced to the securing of employment upon graduation.

The Government of Quebec is aware of the difficulties inherent in the school-work transitions, and is considering the possibility of conducting a five-year longitudinal study based on a cohort of young secondary school, college and university graduates. The purpose of this study would be to trace their employment pathways to try to grasp the scope and complexity of the school-work transitions so pivotal to their future.

In the same vein, researchers at Laval University's career development research centre, the Centre de recherche sur le développement de carrière (CERDEC), in Québec City, are currently looking at the school-work transition. According to the preliminary results of a longitudinal study (1993-99) by Geneviève Fournier on a cohort of secondary school vocational education, college technical and university undergraduate students, two thirds of the subjects who had jobs after being out of school an average of 18 months felt that their employment situation did not allow them to make long-term plans, whether or not they were working in their field of study. When asked for a description of a successful school-work transition, these young people usually listed continuity in the labour market, financial security, the ability to make plans and fulfil personal and professional dreams, competence in one's chosen field and employment status, in addition to traditional employment-related indicators. These results show the limitations of objective employment-related indicators in defining a process as complex as the school-work transition.

Another team of researchers attempted to determine the beginning and end of the school-work transition. They used a qualitative method to put together a portrait of how graduates saw the transition process eight years after leaving university. The participants in this study were bachelor's degree holders from Quebec universities.[10]

The conclusions drawn by this group of researchers are of particular interest. It would appear that some graduates consider themselves to be integrated into the labour force when they hold a stable job they do not plan to quit in the short term, even if the job is not directly related to their field of study.

Others, however, have a completely different perception and consider themselves to be integrated when they have developed an ability to stay active in the labour force, in other words, when they have achieved a certain level of "employability." These graduates acknowledge that the labour market has changed and that fewer and fewer stable jobs are available. In their view, the fact that they do not have a steady job does not mean they have not integrated into the labour market. Rather, they define integration as the ability to avoid unemployment, an ability which provides them with a form of stability.

[10] Trottier, Laforce and Cloutier, 1997.

The relation between education and employment was another key aspect raised by the participants in this study. Some felt that the transition to working life was complete only when one secured a job in one's field of study. Many felt that social integration in the work place and in their profession also had some importance. After developing a sense of their identity as members of their profession over the course of their studies, they want some form of confirmation by their peers. Success in entering the labour market and finding employment related to one's field of study is a crucial factor here. Obtaining a degree is not enough to socially corroborate one's professional identity.

Others place little or relatively little importance on the relation between education and employment. Some cited the economic conditions which existed at the time they started their transition to working life. They felt they had no choice but to make compromises as far as the education-employment relation is concerned. However, economic conditions are not the only reason why the graduates made compromises. Some considered their family responsibilities or their partner's work situation. "The fact that some graduates took into account their partner's career goals effectively illustrates that labour market integration is only one of the aspects involved in starting out in adult life and that it occurs in parallel with other events which may influence the course of their working lives and their integration strategies."[11]

The work of the CERDEC researchers clearly shows that the transition to working life is not simply a process whereby initial education leads to stable employment. The qualitative method used calls attention to the fact that a successful transition cannot be defined only in terms of criteria that are external to the individual. The transition process has become a complex phenomenon that is sometimes influenced by factors which are completely unrelated to the education system and the labour market. In addition, its success hinges on subjective factors. Economic indicators may provide a certain image of the transition from initial education to working life, but some of the criteria used to define a successful transition are subjective. An individual may seem to have successfully made the transition to working life, but may not feel integrated into his or her trade or profession. Another individual may be perceived as still being at the transition stage, but perceive himself or herself as having successfully completed the transition.

Concerns about the Transition Process and Outcomes

In addition to perceptions of what is meant by a successful transition to working life, a number of objective problems may hinder the transition process.

Concerns about Education

The school leavers' rate

"As the labour market changes and the emphasis on competitiveness increases, more and more students are dropping out. It is quite paradoxical that over three young people out of ten leave school without any qualifications, at a time when qualifications are increasingly necessary. While employers' requirements are becoming more and more stringent, young people are leaving school early, ill prepared for life in a society where social integration hinges on labour market integration, where individuals define who they are by what they do for a living."[12]

The school leavers' problem is much more severe among males than females. In 1995-96, the school leavers' rate (i.e. the percentage of a generation that will not have a secondary school diploma by the age of 20), was 20.8 percent for females and 33.6 percent for males. "Furthermore, in elementary school and in secondary general education, the number of boys who repeat a given year is always higher than the number of girls. The proportion of boys who repeat a year is at least one and a half times higher than the proportion of girls in the same situation." In 1995-96, 57.3 percent of men and 72.4 percent of women went on to college. The number of women enrolled in technical programs was slightly higher than the number of men (26.8% compared with

[11] Ibid., p. 69. [Translation]
[12] Moreau, 1995, p. 12. [Translation]

24.9%) and far more women than men enrolled in pre-university programs (45.6% for women compared with 32.4% for men). The same year, 40.3 percent of women and 30.6 percent of men enrolled in bachelor's programs. These percentages correspond to the proportion of a generation of young Quebecers enrolling for the first time in a college program or in a program leading to a bachelor's degree.[13]

These figures point to a real problem which the members of the Commission for the Estates General on Education highlighted in its final report. To ensure that males would not be gradually excluded from school, it recommended that research be conducted to more clearly identify the factors underlying many males' marked lack of interest in school and that corrective measures be taken, but that special care be exercised to avoid measures likely to have a negative impact on females.[14]

Vocational and technical education

In Quebec, the improvement of vocational and technical education is one of the main issues in the current education reform. If we consider the Quebec education system in terms of problems related to the transition from initial education to working life, the more obvious problems come to light.

Vocational education is part of secondary education. In 1995-96, Quebec's secondary schools offered 176 initial education programs for young people and adults. Technical education falls under college education. In 1995-96, 124 technical programs led to a college diploma. That same year, 19 vocational education programs and 17 technical programs were in the development stage.[15]

The wide range of programs offered implies that some are very specialized. However, there is not always a strong demand for such specialization in the labour market.[16]

Efforts to rationalize the number of programs offered have been under way for several years and have produced tangible results (there were over 500 vocational education and technical programs in 1985-86). The degree of specialization of certain current programs is now under scrutiny as a part of these efforts. Changes in the labour market could also justify the development of new programs or the splitting up of existing programs.

With respect to individual or social perceptions, it should be noted that vocational education and, to a lesser extent, technical education have long been and are still perceived rather negatively. They were considered by many as a way out of the system for those unable to stay on the regular path to university. This view is still widely held. Almost everyone agrees that students should have the option of enrolling in a vocational education or technical program. However, many feel this route is intended for other people's children, and prefer to imagine their own with a university diploma in hand.

In the unanimous opinion of the participants in the Estates General on Education who addressed the question of vocational and technical education, "there is an urgent need to raise the profile of this sector. Most comments were made with regard to secondary-level vocational education programs, since college-level technical programs still have a strong student base and are generally appreciated."[17]

Enrolments in vocational education dropped sharply until 1993-94, particularly among young people under the age of 20. Only 16,871 young people under the age of 20 were enrolled in a vocational education program that year, out of a total of 58,023 students.

However, the situation has started to improve as a result of measures taken in the last few years (e.g. diversification of programs, cooperative education, apprenticeships).

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[13] Ministère de l'Éducation, *Education Indicators*, 1997, pp. 56-65.

[14] Commission for the Estates General on Education, *Renewing Our Education System*, 1996, p. 9.

[15] Ministère de l'Éducation, *Rapport annuel 1995-1996*, 1996, pp. 43-45.

[16] For example, the following vocational education programs are offered in maintenance mechanics: elevator mechanics, industrial control maintenance mechanics, preventive and prospective industrial maintenance mechanics, industrial sewing machine mechanics, and industrial construction and maintenance mechanics.

[17] Commission for the Estates General on Education, *The State of Education in Québec*, 1996, p. 73.

Between 1993-94 and 1996-97, total enrolments increased by 25 percent from 58,023 to 72,683. **Over the same period, the number of young people enrolled in vocational education programs more than doubled.** There were 24,460 students under the age of 20 in the vocational education sector in 1996-97. This represents a **45 percent** increase over 1993-94.

In spite of this improvement, the number of young people enrolled in vocational education programs is still too low, especially in the Montréal region, where almost **80 percent** of vocational education students are over the age of 20.

While the vocational education sector is having serious problems recruiting young people, the technical education sector must contend with a low graduation rate. "Of the students enrolled in technical education who left college at the end of 1994-95, 51.9% obtained a DEC; this figure has dropped by more than 6 percentage points since 1990-91. The DEC is obtained after an average of 7.3 full-time terms [as opposed to the expected 6 full-time terms]."[18]

Paradoxically, while the vocational education sector must contend with recruitment problems and the technical education sector with a low graduation rate, access to some programs is difficult, despite efforts to increase the capacity of facilities.

In certain strategic occupations, there is still a significant imbalance between the demand for skilled labour and the supply of training. Concerted planning by the partners involved is necessary in order to achieve the best possible balance between education and employment.

However, in their final report, the members of the Commission for the Estates General on Education stressed that "**we must avoid making programs available solely on the basis of labour demand**. As certain participants pointed out, a work force that is overqualified for the immediate needs of the labour market is not necessarily doomed to unemployment or underemployment. It can also become the driving force behind job creation and regional development."[19]

Participants in the Estates General on Education also lamented the fact that, once a student chose to enrol in a vocational education or technical program, there was almost no turning back, and that there was no continuity between similar programs from one level to the next. Too often, students who decide to go on to college or university after earning a vocational or technical diploma must first backtrack to where they left off in order to complete their general education. That is why the commission members felt that "secondary-level vocational education programs and college-level technical programs should...be designed as part of a continuum" as soon as possible in order to avoid forcing secondary school students to make such a costly detour and repeat part of their training because the knowledge and skills they acquired during their vocational studies is not recognized.[20] The Commission members also recommended that the university level be included in this continuum.

Minority groups

The English-speaking community in Quebec has access to a complete network of educational institutions from preschool to university. In 1995-96, this network included 437 elementary and secondary schools, 36 colleges and three universities. Enrolments in these institutions were as follows: 136,281 students at the elementary and secondary levels (including 23,335 students in adult education); 41,183 at the college level; and 58,166 at the university level.

According to the 1991 Census of Canada, English-speaking Quebecers have more education than the overall population: 29.3 percent of Quebecers aged 15 years or over whose first language was English had studied at the university level, compared with 17.9 percent of Quebec adults overall and 16.1 percent of French-speaking Quebecers.

[18] Ministère de l'Éducation, *Education Indicators*, 1997, p. 74.
[19] Commission for the Estates General on Education, *Renewing Our Education System*, 1996, p. 24.
[20] Ibid., p. 23.

Compared with English- and French-speaking Quebecers, Native peoples have little schooling. There are 11 Aboriginal groups in Quebec, eight of which come under federal jurisdiction for elementary and secondary education and financial assistance for postsecondary education. The other three groups – the Cree, the Inuit and the Naskapi – come under the jurisdiction of the ministère de l'Éducation du Quebec but funding is provided by both the federal and provincial governments. In 1995-96, spending per student by the Cree School Board and the Kativik School Board (Inuit) amounted to $14,200 and $14,600, respectively, compared with the average $4,754 for non-Native students for Quebec as a whole (the latter figure excludes capital expenditures, debt service, student transportation and expenses related to extracurricular activities). There is also a wide range of financial support programs for Native communities.

In spite of these efforts, only 23.3 percent of students who started their secondary studies at the Cree School Board or Kativik School Board in 1989 had completed their studies and obtained a diploma in 1996. This graduation rate is much lower than the average rate for Quebec's overall student population for the same period (73.2%). This is partly because school as we know it is not part of the education tradition of Native peoples. The small number of jobs available in their communities also provides little incentive to stay in school.

Like all other Quebecers, members of minority groups qualify for programs run by the ministère de l'Emploi et de la Solidarité du Québec. One program, known as the "francization program," is intended specifically for non-French-speaking immigrants. It teaches them the basics of French in order to help them find a job more easily. Welfare recipients receive benefits for a 12-month period so that they can take part in this program.

Concerns about the Labour Market

In Quebec as in Canada, some segments of the population are harder hit by unemployment than others. Young people are a case in point: youth unemployment has been high for a number of years.

The current structure of employment, which is characterized by technology development, growing job uncertainty and a shift to the service industry, favours workers with a higher education. There were 52,000 more jobs in Quebec in 1996 than in 1990. This increase is "the net result of a growth of 351,000 jobs, filled by persons with postsecondary or university studies, combined with a loss of 299,000 jobs for those who had not completed postsecondary or university studies."[21]

"In general, regardless of the type of education they have pursued, college graduates have lower unemployment rates than secondary school graduates. Similarly, university graduates have lower unemployment rates than college graduates."[22] A postsecondary diploma is therefore an asset for those wishing to enter the labour market. This does not necessarily mean that a young person with a diploma will find a job more easily than an adult without a diploma because employers take candidates' experience into account. "When asked about the reasons for their recruitment problems, employers answered that lack of skills came into play in over 70 percent of cases and lack of experience, in over 50 percent."[23]

The oversupply of labour and market globalization, which have stepped up competition, have encouraged the development of labour management and recruitment strategies such as greater reliance on casual or contract staff and contracting out. New labour market entrants, especially young people, are particularly affected by these strategies. As a result, many young people are excluded from a segment of the labour market in which permanent jobs are concentrated. This situation encourages clandestine work and non-standard employment among young people, such as multiple part-time jobs and self-employment.

The development of labour management and recruitment strategies by employers was

[21] Ministère de l'Éducation, *Education Indicators*, 1997, p. 48.
[22] Ibid., pp. 82-83.
[23] Société québécoise de développement de la main d'œuvre and Human Resources Development Canada, *Enquête*, 1996, p. 37. [Translation]

facilitated by the parallel development of a typically North American phenomenon, namely, students holding paying jobs during the school year. According to a study conducted in Quebec, one out of two students holds a paying job during the school year. "Full-time students who have a job work an average of 14.9 hours per week while part-time students work an average of 33.1 hours."[24]

Among graduates of pre-university college programs who obtained their diploma in 1994-95 and were working in 1996,[25] 53.1 percent had a full-time job. Among undergraduates who obtained their degree in 1992 and were working in 1994, 72.4 percent had a full-time job, but this percentage had been on the decline since 1989. Vocational and technical education graduates were in a better position in this respect. Among those who had obtained their diploma in 1994-95 and were working in 1996, more than 75 percent had a full-time job and this percentage had been rising since 1994. However, it should be kept in mind that, during the same period, the vocational education sector was experiencing serious problems recruiting students, and the technical education sector had an equally serious problem turning out graduates.

Approximately 65 percent of undergraduate degree holders who obtained their diploma in 1992 and were working in 1994 had a full-time job related to their field of study. The situation was not as bright for graduates of pre-university college programs, with less than 10 percent holding a full-time job related to their field of study. In 1996, almost a year after they obtained their diploma, 71.5 percent of graduates from technical programs and 66.8 percent of graduates from vocational education programs held a job related to their field of study. These figures clearly show that many diploma holders have jobs for which they were not trained. In all likelihood, these jobs have lower requirements, so that some new labour market entrants are overqualified for the jobs they hold. In other words, their skills are underutilized, and the result is a loss for society.

"In an anemic job market with high unemployment, employers who must choose between two workers to fill a position will choose the one with more schooling, even if this candidate will not need all of his or her qualifications to do the work and even if the other candidate with less schooling would have been considered perfect for the job had the labour supply not been so abundant."[26] Of course, under these circumstances, workers with less schooling or fewer skills are more likely to be unemployed. This creates a paradoxical situation: while some are overqualified for the jobs they hold, others are clearly underqualified for the available jobs. Early school leavers, who represent approximately 30 percent of Quebec's youth, fall into this second group.

Young adults who leave school without a diploma often end up on welfare. "Young welfare recipients in the 1993 cohort had between 7 and 11 years of schooling in 74 percent of cases and more than 12 years of schooling in 12 percent of cases."[27] Since the percentage of welfare recipients under the age of 30 is relatively high, these figures represent a good many individuals. "In March 1994, 472,939 households were receiving last resort assistance benefits. Of these households, 136,772 were headed by a person under the age of 30, for a total of 29 percent. In terms of individuals, 28 percent were young people under the age of 30 (i.e. there were 153,494 young people out of a total of 546,274 adults)."[28] Yet, in 1994, the 15 to 29 age group accounted for about 20 percent of the population of Quebec.

Measures do exist to give young welfare recipients the opportunity to complete their studies and thereby improve their employability, but these measures have met with only relative success. When young recipients without a diploma "decide to return to school under the Back-to-School measure, their chances of obtaining a secondary school diploma remain

[24] Sales, 1996, p. 168. [Translation]

[25] This amounts to less than 21 percent of graduates since 79 percent of them went on to university without interrupting their studies.

[26] Société québécoise de développement de la main d'œuvre, *Analyse du chomâge et de l'emploi au Québec*, 1996, p. 11. [Translation]

[27] Ministère de la Sécurité du revenu, *Commencer sa vie adulte à l'aide sociale*, 1995, p. 59. [Translation]

[28] Ministère de la Sécurité du revenu, *Profil des jeunes*, 1995, p. 5. [Translation]

slight." Only "22 percent of the persons under the age of 30 who were newly enrolled in the Back-to-School measure in the fall of 1990 had a diploma four years later."[29]

Even if the leaver rate is higher for males than females, more women than men apply for last resort assistance. "The women-to-men ratio (among recipients) is 55:45 when the economy is slack and 61:39 when the economy is improving. These figures suggest that women do not benefit as much as men from economic recovery. The presence of young dependent children may be part of the reason for this situation."[30]

Generally, the difficulties experienced by women who wish to enter the job market are different from those experienced by men. "Women's lifetime earnings will amount to only 50 percent of men's. This wide discrepancy is due to the fact that women's salaries are still lower than men's and that women are more often unemployed or away from work due mainly to pregnancy leave and family responsibilities."[31]

Women have, however, made important gains in the labour market over the last decades. For example, they have secured "over 80 percent of the new jobs created in Quebec since 1976...This seems to indicate that, on the whole, women have adapted better than men to the requirements of the **new economy**. Considering that the wage gap between men and women has been closing for a number of years, the progress made by women in several fields and the fact that year after year, for the past 20 years, they have landed 80 percent of the new jobs created can hardly be explained otherwise than by demand."[32]

The closing of the wage gap between men and women is also due to the application of pay equity measures aimed at establishing a fair balance in the wages paid to men and women, not for similar jobs, but for equivalent jobs. Indeed, it was shown that jobs traditionally filled by women (e.g. secretary, nurse, teacher) did not pay as much as those usually held by men (e.g. plumber, electrician, mechanic), even if the required training, duties and responsibilities were equivalent.

Concerns about the Interface between the Education System and the Labour Market

A 1995 survey of Quebec businesses found that almost 20 percent of establishments with a staff of five or more offered no form of training and that on-the-job training was the most frequently used method in those establishments that did offer training. "Over 63 percent of businesses offer on-the-job training... This figure rises to around 80 percent if those businesses which offer no training are excluded."[33]

After on-the-job training, the most frequently used method is the reimbursement of training expenses. This method was preferred by 35 percent of the businesses that took part in the survey.

Except for on-the-job training, employers seldom see to their employees' training themselves. Involvement in their employees' training is rather limited, even though on-the-job training is generally not recognized or transferable, which, in the long run, is not to the workers' advantage.

However, on-the-job training is almost inevitable when there are gaps between the initial education of workers and the jobs for which they were hired. That such gaps exist may be surprising in the case of new labour market entrants, especially when these new entrants are recent graduates. This situation can be attributed to a number of factors. The overspecialization of certain programs was discussed earlier, as was employers' tendency to hire overqualified workers when the labour supply is higher than the demand. Such factors affect the value accorded the diploma in the transition from school to work. When it comes to finding a job, the diploma's value is measured

[29] Ministère de la Sécurité du revenu, *La pauvreté*, 1995, p. 6. [Translation]
[30] Ministère de la Sécurité du revenu, *Commencer sa vie adulte à l'aide sociale*, 1995, p. 62. [Translation]
[31] Ministère de la Sécurité du revenu, *La pauvreté*, 1995, pp. 10-11. [Translation]
[32] Société québécoise de développement de la main d'œuvre, *Analyse du chômage et de l'emploi au Québec*, 1996, p. 39. [Translation]
[33] Société québécoise de développement de la main d'œuvre and Human Resources Development Canada, *Enquête*, p. 13. [Translation]

in terms not only of the education or training it certifies, but also whether there is a real demand for it in the labour market.

The number of young people leaving the school system with no qualifications for a trade or occupation is a major problem in Quebec. Many young people, especially males, are leaving school before they obtain their first diploma. This does not necessarily mean that students leaving school with one or even two diplomas will have the qualifications needed for a job. The secondary school and college general diplomas may be prerequisites for higher studies, but they do not certify that the holder has occupational skills.

It is important here to note that 43 percent of students leave the system with no training for a trade or occupation, and that 28 percent of students leave school with a secondary school diploma but with no qualifications to enter a trade or occupation or to go on to university.

Young school leavers who end up on welfare and decide to pursue vocational studies as part of a program sponsored by the ministère de l'Emploi et de la Solidarité unfortunately do not choose to pursue studies leading to jobs in high demand on the labour market. When asked to explain why they chose a certain area of study, barely 16 percent gave employment prospects as a reason. In fact, enrolments are concentrated in 10 or so vocational education programs, some of which offer only very limited employment prospects.

At the college level, of 100 students who left a pre-university program, 36 dropped out. At the university level, 36 percent of students leaving bachelor's programs did so without a degree.[34] These college or university leavers have at least one diploma which certifies that they completed a basic education but have, in fact, no real training in a specific area. This worrisome state of affairs led the members of the Commission for the Estates General to conclude that "it is essential that we direct our efforts towards ensuring that **no student leaves the education system without qualifications**."[35]

[34] Ministère de l'Éducation, *Education Indicators*, 1997, pp. 6-8.
[35] Commission for the Estates General on Education, *Renewing Our Education System*, 1996, p. 21.

Many different factors govern the interface between the education system and the labour market, and qualifications provide no absolute guarantee of a successful transition to working life. They are nonetheless a major asset.

Other problems in Quebec with respect to the interface between the education system and the labour market include:

- the fragile link between the work done in school by teachers or non-teaching professionals and current practices in the labour market. This problem is accentuated because certain practices keep changing as a result of the very rapid advancement of technology;
- the lack of adequate means to provide students with access to effective guidance services, especially with current spending cuts;
- insufficient emphasis on the development of entrepreneurship among young people, a problem which is now starting to interest many stakeholders;
- the difficulty for students of reconciling academic excellence and work during their studies, regardless of whether they are working to meet basic or secondary needs (this is a problem typical of North American societies); and
- the lack of cooperative education opportunities which would allow students to gain hands-on experience in their field before they enter the labour market. This problem is due to the low popularity of student trainee placements, particularly among employers, who see them as a threat to productivity, and among unions, which see them as a threat to their members' jobs.

Changing Expectations and Objectives

The interface between the education system and the working world is also governed by subjective elements which come into play in individuals' choices. The choices made by students, workers and employers are determined by their perceptions and aspirations.

Well founded or not, these perceptions and aspirations are in turn shaped by such factors as socio-economic background, family situation and place of residence.

Researchers at CERDEC were able to establish that high unemployment rates have an impact on young university graduates' aspirations and may also influence secondary school students' expectations. "Good employment prospects would be expected to help settle a number of problems with respect to students' motivation and to dropping out."[36]

Young welfare recipients, many of whom leave school without obtaining a diploma, tend to resign themselves to their situation. "Their academic and occupational track record, combined with difficult economic conditions, does not encourage them to make any kind of effort. Why invest in education when there are no jobs to be had after graduation? What ambitions can you cherish when you do not have even the lowest diploma required for a job? What should young people expect from school, which lets them down to the same extent when they are dropping out?"[37]

However, a high level of motivation was observed among welfare recipients undertaking vocational studies. A survey of a cohort of recent vocational education enrollees showed that over three-quarters would pursue their studies even if they had to give up welfare benefits. Ninety-three percent said that higher welfare benefits were not what motivated them to enrol in the program.[38]

According to a pan-Canadian study, most secondary school students have high academic and occupational aspirations. Most expect to become professionals, think about their careers in middle-class terms and have little interest in technical jobs or careers in the skilled trades.[39]

Employers' perceptions of graduates should not be neglected in looking at issues related to school-work transition. According to a 1994 survey of employers who had hired at least one vocational or technical education graduate, employers were satisfied with the graduates' knowledge, except with respect to language skills, particularly their ability to communicate in writing. With respect to performance after three months on the job, 77 percent of employers were satisfied or very satisfied with technical education graduates. In 1994, 90 percent of the employers were satisfied with the graduates' performance after one year of work, compared with 87 percent in 1990. Another noteworthy finding is that "in 1994, 44 percent of the employers maintained that on-the-job training would be equivalent to formal education, whereas 51 percent stated that on-the-job training would not be as valid or that it could never replace formal education. In the 1990 survey, these proportions were 41 percent and 54 percent, respectively."[40]

Policy Changes

General Policy

Education reform

The education reform under way in Quebec is the product of a democratic process which, in addition to considering the objective realities of the education system and of the labour market, took into account the opinions, views and aspirations expressed by all sectors of society. The Estates General on Education, launched in 1995, was structured to ensure that Quebecers in all regions would be consulted on problems in education, on measures to be taken to address these problems, and on medium- or long-term adjustments needed to ensure that the education system is able to adapt to the socio-economic changes to come with the next century.

After devoting several months to consultations and public hearings, the members of the Commission for the Estates General on Education tabled their final report. They had previously published a report on the state of education in Quebec in which they summarized participants' submissions and suggested questions for further discussion. This report also included short accounts of innovative experiments under way in Quebec and successful

[36] Baby, 1992, p. 33. [Translation]
[37] Ministère de la Sécurité du revenu, *Commencer sa vie adulte à l'aide sociale*, 1995, p. 92. [Translation]
[38] Moreau, *Les programmes* [in press], pp. 25 34. [Translation]
[39] Krahn, *School-Work Transitions*, 1996, p. 19.
[40] Ministère de l'Éducation, *Education Indicators*, 1997, pp. 100-101.

projects which could serve as examples. These accounts were intended to show that it was not necessary to rebuild the Quebec education system from the ground up, but that a number of renovations were in order.

The first phase of the reform was started in February 1997 under the leadership of Minister of Education Pauline Marois. As stated in the ministerial plan of action, the challenge consisted in moving on from the goal of **access for as many students as possible to that of success for as many as possible.**[41] Clear goals were set to that effect: in 2010, at least 85 percent of students of a given generation are to obtain a secondary school diploma before the age of 20, at least 60 percent, a college diploma, and at least 30 percent, a bachelor's degree. For the sake of comparison, in 1995-96, out of 100 students of a given generation, 73 obtained a secondary school diploma before the age of 20, 39, a college diploma, and 28, a bachelor's degree.

The following seven lines of action were defined to attain these goals:

1. Providing services for young children
2. Teaching the essential subjects
3. Giving more autonomy to schools
4. Supporting Montréal schools
5. Intensifying the reform of vocational and technical education
6. Consolidating and rationalizing postsecondary education
7. Providing better access to continuing education

Two of these lines of action will have a direct impact on the way in which issues related to the transition from initial education to working life present themselves in Quebec.

Intensifying vocational and technical education reform: The changes already under way in the area of vocational and technical education are aimed at the following:

- designing programs that will provide students with qualifications allowing them to either join the work force or continue their studies;
- diversifying the paths leading to certification and the training approaches used;
- reviewing the general education component of vocational education and technical programs;
- ensuring that vocational education and technical programs better meet labour market requirements;
- increasing the responsibilities of vocational education centres;
- encouraging students to go on to more advanced programs by building bridges between the levels of education;
- quadrupling, over the next five years, the number of vocational education diplomas awarded to students under 20 years of age; and
- making students, parents and the business community more aware of vocational and technical education as valid options.

These goals are being achieved through a variety of means, the main ones being:

- providing better information, especially to parents and students;
- providing earlier access to vocational education and easier access to technical education;
- developing programs leading to semi-skilled trades;
- implementing an apprenticeship system under which businesses can provide training leading to a diploma;
- encouraging cooperative education[42];
- increasing the supply of services and the number of openings in vocational and technical education;

[41] Ministère de l'Éducation, *A New Direction for Success*, 1997, p. 1.

[42] Cooperative education refers to a system in which students learn a trade or occupation through alternating periods of school-based instruction and industry-based training. An industry-based training period may be aimed at providing student trainees with opportunities to apply the skills they have learned in class (usually long-term placements with pay) or to cover certain sections of their program on the job (usually short-term placements without pay, i.e. three or four weeks).

- redesigning the general education component of college-level technical programs;
- improving the harmonization of programs between the levels of education[43]; and
- coordinating the development of vocational and technical education offerings through joint planning.

Providing better access to continuing education: The goal of improving access to continuing education involves ensuring that the concept of learning as a lifelong process is taken into account at all levels of the education system. It also involves providing services that reflect the diversity of adults' needs, introducing effective strategies to combat illiteracy, and clarifying the roles and responsibilities of the various players in the continuing education field.

Work on a continuing education policy has begun. The purpose of this policy is to determine what is required to attain these goals.

New federal-provincial labour market development agreements

In April 1997, the Government of Quebec signed an agreement in principle with the federal government on active labour market development measures (including labour market training). In November 1997, the two governments signed the Canada-Quebec Labour Market Implementation Agreement.

Under this agreement, services will be decompartmentalized and made available to all categories of clients. A one-stop shopping centre will be created for job seekers, whether they are unemployed, on welfare or simply looking for employment. This approach will make it possible for Quebec to fully exercise its jurisdiction in the area of education, which includes labour force training.

Quebec will from now on exercise its rightful responsibility to develop, manage and evaluate labour force training policies and programs.

Labour policy

Labour policy has a definite impact on youth transition to working life. Quebec adopted its active labour market policy to coordinate passive income support measures and active employment measures (including skills training and upgrading). The government subsequently passed the Act respecting the ministère de l'Emploi et de la Solidarité (Bill 150), which established a commission of labour market partners. The Act to foster the development of manpower training (commonly known as Bill 90), the Regulation respecting the apprenticeship scheme, and the measures announced in the 1997-98 budget speech should also help young people find a place for themselves in the labour market.

Follow-up and Research

The review of government programs will provide an opportunity to adjust the measures implemented under these new policies. As for the education reform, a follow-up committee "will give all participating partners the opportunity to provide input on relevant issues" and will ensure continued support for the reform at all levels.[44]

The collection and dissemination of specific data on the Quebec education system in the form of indicators is also helpful in this respect. These indicators are used to measure the results of specific activities, such as the extent to which the current reform is attaining its stated goals. They also provide a glimpse of changes that would be desirable, and perform an eminently democratic function in that they provide those responsible for running the education system with a means of being accountable to the State and, by the same token, to the population they serve.

The active employment measures designed for the unemployed are systematically evaluated by both the Société québécoise de développement de la main-d'œuvre and the ministère de l'Emploi et de la Solidarité. Several aspects are examined, namely, the relevance of programs, participants' satisfaction and impact in terms of jobs found.

[43] The goal of such harmonization is greater cohesion between secondary-level vocational education programs and college-level technical programs, and between college-level technical programs and university programs.

[44] Ministère de l'Éducation, *A New Direction for Success*, 1997, p. 55.

Additional information

Additional information on education and labour policy and, more specifically, on the various vocational education and technical programs offered in Quebec is available through a number of publications which are updated regularly by the relevant ministries. These publications contain data and tables which shed further light on the issues outlined in this review.

Here are a few useful Websites for those who have access to the information highway:

- the official site of the Quebec government: http://www.gouv.qc.ca
- the site of the ministère de l'Éducation du Québec: http://www.meq.gouv.qc.ca
- the vocational and technical education information highway: http://www.inforoutefpt.org
- the site of the ministère de l'Emploi et de la Solidarité: http://www.mes.gouv.qc.ca
- the site of the Bureau de la statistique du Québec: http://www.bsq.gouv.qc.ca

The selected information, data and tables appearing in Appendix 2 are from the publication, *Education Indicators: 1996 and 1997 Edition*, which is available on the Website of the ministère de l'Éducation.

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4. TRANSITION IN OTHER PROVINCES – SUMMARY OF PROVINCIAL RESPONSES TO THE QUESTIONNAIRE

As part of the preparation for the Canadian Background Report, questionnaires were sent to five provinces that agreed to participate in the survey.

Table 6: Number of Students Enrolled in School and Total Expenditures

	Enrolment		
	K-12	Post-secondary	Total Expenditures
Newfoundland	114,445	19,115	1,388,770
New Brunswick	138,306	23,111	1,386,196
Ontario	2,140,085	356,739	22,013,646
Manitoba	221,747	26,880	2,126,923
British Columbia	638,111	78,507	7,036,814

The survey included 35 questions, grouped into the following categories:

- General: the meaning and nature of transitions
- Initiatives: provincial and local programs and innovations
- Trends: changes in programs, services and curriculum content
- Programs: current transition programs and services
- Youth: characteristics, expectations and gender differences
- Research: projects completed or currently under way.

General

The Concept of Transition

Approaches to the concept of transitions vary. Manitoba has no operating definition. Ontario has a working definition related to the direct shift from high school to the first full-time or self-employed working experience. Other provinces take a broader view in terms of career development and the process of lifelong learning beginning in elementary school.

The Economic Situation

In Manitoba, there has been a rapid recovery from the economic recession of the early 1990s. Other provinces stress continuing economic challenges, such as slow economic recovery, few job opportunities for youth, globalization, technology, downsizing and demand for higher skill levels.

The Transition Problem

In every province, school-to-work transition is considered a serious challenge, especially for those with less than postsecondary education. In New Brunswick, the youth unemployment rate is 21 percent. In Ontario, 50 percent of high school graduates go directly to work; unemployment rates range from about 10 percent for those with postsecondary credentials to almost 25 percent for those with less than nine years of schooling.

The Transition Period

All provinces agree that the transition period is longer and more difficult than in the past because of fewer jobs and higher demands for qualifications, but opinion is mixed on whether the transition is occurring later. British Columbia stresses that the beginnings and endings of transition periods are blurring.

Policy Documents

Ontario and British Columbia have extensive policy documents dealing with transitions and British Columbia has created a Centre for Educational Information Systems and Standards (CEISS) to provide system-wide data and information services, including those related to transitions.

Initiatives

Provincial Responsibility

All provincial departments of education have special positions or structures with specific responsibility for transition programs and services. In Newfoundland, programs are developed by three divisions – Program Development,

Student Support Services and Youth Services. New Brunswick has created a special position for transitions and a Postsecondary Innovations group with transition programs as part of its mandate. In Ontario, responsibility is shared between the Secondary School Project in the Elementary/ Secondary Policy Division and the Training Division. The Ministry recently formed a school-to-work transition committee to share information and develop a comprehensive vision of transitions. Responsibility in Manitoba is with the Youth Programs Branch and there is also a Children and Youth Secretariat involving departments of Health, Family Services, Justice, and Education and Training. In British Columbia, responsibility is with the Careers Programs Branch.

Structural Changes

Four of the five provinces are currently undergoing important structural changes which will have an effect on transitions. Ontario is in the midst of major secondary education reforms, including changes in guidance and career education programs. Newfoundland is preparing a new K-12 Career Development Education Program. New Brunswick has a comprehensive K-12 guidance program, Career and Life Management (CALM), a component of its new Foundation Program in Grades 9 and 10, and a Career and Academic Planning Portfolio is being implemented in Grades 6 to 12. In British Columbia, all graduating students must meet the requirements of a Career and Personal Planning course, and recent curriculum revisions have included the release of more than 60 Integrated Resource Packages which include outcomes related to career awareness and applications of subjects to the workplace.

Major Initiatives

There are many initiatives at the provincial, district and school levels, though there is little comprehensive information about programs at district and school levels. A number of districts in Newfoundland offer the federally funded Youth Internship program; the main program in New Brunswick is the New Brunswick Youth Apprenticeship program for high school students bound for work or postsecondary education and there are programs in cooperative and entrepreneurship education in both English- and French-language sectors; British Columbia has a set of programs called A Guarantee for Youth, including government work experience and a student summer work program. Ontario has a program called Bridges which addresses work-bound Grade 10 to 12 students, as well as programs in cooperative education, youth apprenticeship, career preparation and career education partnership projects; it also has a Website called Career Gateway.

Business Involvement

All provinces report active and growing involvement of the business community through cooperative education, internship and school-business partnerships at the local level. In British Columbia, 46,000 secondary students are enrolled in a career program with a minimum of 30 hours of work experience; partnerships are an integral part of programs in Ontario, such as Bridges, and the Ministry is developing a partnership strategy to expand these kinds of programs.

Postsecondary Involvement

Provincial ministries are working with postsecondary institutions, especially community colleges. In British Columbia, the government is working with colleges and institutes on the approval of new programs and the review of existing programs; in general, universities develop their own internship programs with business and the community.

Trends

Secondary Trends

Two provinces (New Brunswick and Ontario) mention a decline in traditional vocational, office practice and home economic courses; in New Brunswick, the French sector has eliminated vocational courses. Trends are toward new curricula and increased enrolment in integrated technology courses, such as the Broad-Based Technological Education program in Ontario which replaced 90 specific vocational courses with 7 broad technological areas; in British Columbia, enrolment in

career courses has risen from under 10,000 in 1991 to over 27,000 in 1996, with the major increase in natural and applied sciences.

Postsecondary Trends

New Brunswick reports a trend to the development of employer advisory committees for postsecondary programs. In British Columbia, there has been a 16 percent increase between 1991 and 1995 in career and technical programs, in addition to the development of new kinds of applied programs; degree-granting status has been granted to the British Columbia Institute of Technology and the Emily Carr College of Art, and the Technical University of British Columbia has been founded.

Programs

Secondary School Technical Courses

Three provinces include technical education as a requirement for high school graduation. In New Brunswick, all students must meet minimum competence levels in computer literacy and the technology outcomes of the Foundation Program; there is a required course in technology in the French sector and there are optional courses in the English sector. Ontario requires students to complete either a business or technological credit for graduation and there are optional Broad-Based Technological Education courses. In order to graduate in British Columbia, students must complete two credits in Applied Skills, with a choice among business education, home economics and technology education. Newfoundland has five optional courses and others under development.

Work-Study and Cooperative Education

All provinces have a variety of work-study and cooperative education programs, sometimes linked to provincial graduation requirements, but more commonly on the initiative of individual school districts and schools. In British Columbia, for example, all secondary schools are required to offer a four-credit course, required for graduation, called Career and Personal Planning, one credit of which is for a minimum of 30 hours of work experience; in British Columbia, there are also three kinds of career programs, Career Preparation (120 hours of work experience), Co-operative Education (240 hours) and Secondary School Apprenticeship (480 hours). New Brunswick offers 720 hours of curriculum/work experience through its Youth Apprenticeship Program.

School-Business Partnerships

All provinces have a range of school-business partnerships, most arising from local arrangements to address particular needs and interests. In Newfoundland and New Brunswick, provincial guidelines have been developed or are in the process of development; partnerships may involve colleges and universities, utilities and primary industries, high-technology companies and voluntary organizations. There is little systematic information on the nature, types and impact of partnerships.

Career Guidance and Counselling

All provinces offer career counselling services through the office of the school guidance counsellors, but counsellors in several provinces report that personal and crisis counselling often takes time and attention away from career counselling. Newfoundland is preparing a new comprehensive program in career development education and a new comprehensive guidance and counselling model is being implemented in New Brunswick; in British Columbia, most secondary schools have Career Centres which have print resources and often Internet access.

Employability Skills Profile

In 1993, the Conference Board of Canada developed an Employability Skills Profile listing academic skills, personal management skills and teamwork skills. This profile is used in all provinces in a variety of ways, sometimes integrated into career development and cooperative education courses (e.g. in Newfoundland and New Brunswick), sometimes to help students prepare portfolios (e.g. in Manitoba and New Brunswick), and sometimes as part of curriculum profiles (e.g. in British Columbia).

Disadvantaged Populations

All provinces attempt to serve groups in the population that suffer disadvantages in transitions. They often do this with special programs addressed to Aboriginal youth, women in non-traditional occupations, students at risk of failure and those needing to improve literacy skills. Most of these programs are developed at the local level.

"Tech-Prep" and Applied Academic Courses

Provinces tend not to use these terms but the concepts are being developed in general technical courses such as the Broad-Based Technological Education programs in Ontario and New Brunswick and in four new curriculum areas in British Columbia – information technology, applications of mathematics, applications of physics, and technical and professional communications.

School-based Enterprises

Such enterprises are not common in most provinces, but there are some projects in New Brunswick (e.g. running a cafeteria and building a home or community playground).

Mentoring

Most provinces report mentoring activities are becoming more common but, in most cases, mentoring is informal and a component of cooperative education and apprenticeship programs. Ontario reports mentoring programs by senior citizens for children at risk.

Outcomes

In four of the five provinces, programs are being developed from lists of outcomes (in Ontario, the term "expectations" is used). In Newfoundland, all newly developed curriculum is outcomes-based; in New Brunswick, outcomes-based education and cross-curricular expectations are the cornerstones of the new Foundation Years Program (Grades 9 and 10) and community college curriculum is outcomes-based; the Ontario elementary school curriculum focuses on expectations and standards in key areas and the new secondary school curriculum will build on these; the newly developed Integrated Learning Packages of British Columbia contain provincially required learning outcomes, instruction and assessment strategies, and suggested support materials.

Adult Education Programs

Adult Basic Education programs are offered in all provinces, sometimes through community colleges and sometimes by special groups such as Literacy New Brunswick, Human Resources Development Canada skills training, special Career Employment Preparation Programs for out-of-school youth in Ontario, and community-based Skill Centres in British Columbia.

Youth

Characteristics

Some provinces point to the specific characteristics of their youth population: regional variations in New Brunswick in both educational attainment and employment opportunities; in Manitoba, a large and increasing proportion of Aboriginal youth (14% of the 15-24 age cohort in 1991) and a concentration of two thirds of the Manitoba population and employment in the city of Winnipeg. In Ontario, it is noted that the youth share of the labour market is gradually falling, the youth part-time employment rate is high, youth are staying in school longer, and unemployed youth do not have access to financial support available to other unemployed workers.

Gender

Four provinces identify gender differences in attainment and career aspirations, noting that females tend to get more education than males and tend to earn less; men and women tend to concentrate in different occupations and in some cases the differences are significant. In British Columbia, the graduation rates were 75 percent for females and 67 percent for males, yet only 17 percent of undergraduate students in engineering and applied science were women; 6 percent of new 1994 apprentices and 3 percent of new appointees in traditional male trades were women.

Youth Aspirations

Provinces note a trend to aspirations in technical and information fields and to postsecondary education; there is more youth concern for school-work connections and for control over their programs. There is acceptance of the prospects of more costly postsecondary education and of precarious employment, and significant differences exist in the aspirations of school leavers and graduates.

Research

Research Projects

Examples include: *Youth Transition into the Labour Market* (Newfoundland); *Life After High School* (New Brunswick); the *Enhanced Employability Project* (Ontario); the *Centre for Educational Information Standards and Services* (British Columbia).

Research and Information Needs

There is little systemic information about transition populations and transition programs, especially programs at the district and local levels. There seem to be relatively few research studies, especially longitudinal studies, on the effectiveness of transition programs in terms of improved employment prospects for different categories of youth.

ANNEX

Provincial Responses to the Questionnaire

NEWFOUNDLAND AND LABRADOR

General

1. *How would your province define the concept "transition from initial education to working life?"*

   Transition is a process that is lifelong, with the development of skills beginning in the primary grades and progressing throughout the secondary system. There is an emphasis on planning in the final grades.

2. *Are there particular factors in the economic situation of the province that affect school-work transitions for young people?*

   Only 13 percent of high school students are working part time; this lack of experience may limit to some extent their understanding of work and thus inhibit individual transitions.

3. *How serious is the problem of school-work transitions in the province? For university graduates? For graduates of community colleges? For secondary school graduates and leavers?*

   Although the number of school completers has improved significantly over the past 10 years, the rate of leaving is still about 15 percent, of whom 25 percent will complete a high school diploma and 30 to 40 percent will pursue further education or training.

4. *Is the transition taking longer than it did 10 years ago?*

   The transition period is longer with downsizing and a shift to a knowledge-based economy; education and training periods are longer and so is the search for work.

5. *In general, is the transition occurring at a later age?*

   The transition process is not occurring later but entry into work may be occurring later.

6. *In general, is the period of transition more difficult or more complex or more traumatic than it used to be?*

   Transitions are more convoluted than in the past due to the unpredictability of the labour market; young people need to determine their strengths and then determine which is the best area in which to use these strengths.

7. *Is the transition more difficult for certain groups of young people than for others? Which groups?*

   It is more difficult for early school leavers and for students limited in career exploration.

8. *Does the province have data related to transition programs from school to work (volume, target population, characteristics of clientele served, cost, sources of funding, admission requirements and prerequisites, nature of the program, evaluation of effectiveness)?*

   —

9. *Are there special studies (policy documents, research reports, working papers, program evaluations) related to transitions in your province? Would you send a copy with the responses to these questions?*

   Spain and Sharpe, *The Youth Transition into the Labour Market* (1990).

Initiatives

10. *Is there a special department or unit in the provincial department of education or in other departments primarily concerned with issues related to school-work transitions?*

    The divisions of Program Development, Student Support Services and Youth Services have developed programs addressing transitional needs from different perspectives.

11. *Are there changes being made or planned in the structure or curriculum of schools that are intended to have an impact on school-work transitions?*

    A Career Development Education Program from K to 12 is currently under development and should assist youth in transition.

12. *Are there special initiatives sponsored by the province dealing with programs or services in school-work transitions (transition programs, youth employment, etc.)?*

    The Division of Youth Services is piloting a program Tutoring for Tuition, which assists the financial aspects of transition.

13. *Are there school districts with innovative programs in this area?*

    —

14. *Are there individual schools with innovative programs?*

    Several schools and districts offer the federally funded Youth Internship program which explores growth sectors of the economy from a local and global perspective.

15. *Are there examples of business and industry becoming involved in helping young people make the transition from secondary school to work?*

    Business-education partnerships have been developed through Co-operative Education Programs and Youth Internships; in the past three years, schools have received national awards from the Conference Board of Canada.

16. *Is the provincial government involved in programs at the postsecondary level?*

    —

Trends

17. *What have been the major trends in the past five years in "traditional" secondary school vocational programs (carpentry, auto mechanics, etc.)? In enrolments? In program development? In resource allocation?*

    Provincial course development is attempting to address the needs of the changing economy by placing emphasis on the integration of technology into the curriculum and a strategic plan to do this has been developed.

18. *What have been the major trends in secondary school technical or career programs (CAD, CAM, office practice, etc.)?*

    Local and provincial courses have been developed in school-to-work programs; the focus for local courses has been on growth sectors of the local economy.

19. *What have been the major trends in postsecondary career and technical programs (e.g. in community colleges)?*

    —

Programs

20. *Are there required or optional courses in technology at the secondary school level?*

    There are five authorized optional provincial courses in technology education and others are under development.

21. *Do many secondary schools offer work-study or cooperative education programs? In what occupational areas? Do community colleges offer such programs? Are these programs effective?*

    A provincial cooperative education program is available to all schools and about 100 schools offered the program in 1996-97.

22. *Do secondary schools commonly offer career information and counselling programs to students? On what data do they rely? How effective are these programs?*

    Guidance counsellors offer career counselling; information comes from the CHOICES program and from provincial and national HRDC resources; high schools have been using a course in Career Education since 1990 and a new comprehensive program in career development education is being prepared. A survey of guidance counsellors in 1993 indicated that counsellors placed career guidance as a high priority but that personal and crisis counselling consumed their time.

23. *What is the general situation of school-business partnerships? Are they common? Is the number increasing? Are there different models? What appear to be the benefits of these partnerships? Are there areas of concern?*

    Several models of partnerships exist; the Division of Curriculum Development has

created guidelines for partnerships; partnerships have allowed students to enrich their class learning; partnerships are less likely to develop in rural areas because of a shortage of business opportunities.

24. *Is much use being made of the Conference Board of Canada's "Employability Skills?" If so, how?*

    They are an integral part of the provincial Career Development Education Foundation document.

25. *Are there special secondary school programs for certain targeted populations such as Aboriginal youth, students with special difficulties and challenges, women interested in non-traditional occupations, visible minorities, students with poor literacy skills and students at risk of leaving school? Are these programs effective?*

    Through the Division of Student Support Services and through initiatives of individual school districts, programs have been developed that address the individual needs of students.

26. *Are there tech-prep or applied academic courses and programs? Examples?*

    The Department of Education is developing guidelines for the establishment of high school apprenticeships.

27. *Are school-based enterprises common? Examples?*

    Provincially designed courses in Enterprise Education assist students to formulate business plans and follow through to a venture.

28. *Are formal mentoring programs common? Examples?*

    Mentoring occurs within the cooperative education program but no formal mentoring programs have been developed; training of trainers was provided provincially in the mid-1990s.

29. *Is there a focus on outcomes-based education, mastery learning or cross-curricular expectations?*

    All newly developed curriculum in the province is outcomes-based; outcomes for each subject area are defined for each grade level; the Department is encouraging connections both within and across disciplines.

30. *Are there special adult education programs directed to youth in transition? Are there data on the clientele of these programs (e.g. level of schooling)?*

    Adult Basic Education is available at both private and public colleges, depending on need; testing and certification are the responsibility of the Department of Education; individuals arrange for their own training.

Youth

31. *Are there distinctive characteristics of the youth in the province (geographic distribution, size of cohort, ethnic/linguistic diversity, educational attainment)?*

    —

32. *Are there gender differences in attainment and career aspirations?*

    —

33. *Have there been important changes in the educational and career aspirations of youth in recent years?*

    —

Research

34. *Are there any research projects or pilot projects recently completed or currently under way dealing with:*
    - *the problems of young people finding jobs,*
    - *the effectiveness of transition programs, and*
    - *the job opportunities for young people over the next few years in the province?*

    Youth Transition into the Labour Market, a longitudinal study of youth in transition in Newfoundland from 1989 to 1993; and HRDC Newfoundland Head Office, *Youth Employment Statistics.*

35. *Are there other points, examples or comments that would clarify the situation of youth transition in the province?*

    —

NEW BRUNSWICK

General

1. *How would your province define the concept "transition from initial education to working life?"*

   There is a need to take a broader view of transition as an experiential process that begins as early as elementary school and extends into young adulthood; it focuses upon the planned, purposeful sequence of activities which helps to prepare youth to move into productive careers and citizenship.

2. *Are there particular factors in the economic situation of the province that affect school-work transitions for young people?*

   Factors include slow economic recovery, high rates of unemployment (especially among youth), decline of natural resources as an economic engine, growth of the lower-wage service sector and increase in part-time jobs. There are fewer opportunities for youth to gain work experience due to reduction of the full-time work force and increase in the number of small businesses.

3. *How serious is the problem of school-work transitions in the province? For university graduates? For graduates of community colleges? For secondary school graduates and leavers?*

   The youth unemployment rate is 21.6 percent; 80 percent of postsecondary graduates are employed; 42 percent of community college graduates and 65 percent of university graduates are enrolled in additional training.

4. *Is the transition taking longer than it did 10 years ago?*

   —

5. *In general, is the transition occurring at a later age?*

   There is a perception that it is taking longer, noted by increased enrolments in postsecondary programs and a decrease in the number of full-time jobs.

6. *In general, is the period of transition more difficult or more complex or more traumatic than it used to be?*

   It is more complex because fewer jobs are available to youth and employers are demanding higher educational and skill level qualifications (even beyond job requirements), fueling postsecondary enrolment. Lack of job security is due to massive downsizing in the public and private sectors.

7. *Is the transition more difficult for certain groups of young people than for others? Which groups?*

   It is more difficult for those who have not completed high school, for First Nations youth and for youth with disabilities.

8. *Does the province have data related to transition programs from school to work (volume, target population, characteristics of clientele served, cost, sources of funding, admission requirements and prerequisites, nature of the program, evaluation of effectiveness)?*

   Evaluation of the Canada/New Brunswick Youth Strategy Program, HRDC (1994); *Assessment of NB Youth Apprenticeship Program*, Abt Associates (1995).

9. *Are there special studies (policy documents, research reports, working papers, program evaluations) related to transitions in your province? Would you send a copy with the responses to these questions?*

   There is policy development by the Department of Education and Department of Advanced Education related to transitions, in progress.

Initiatives

10. *Is there a special department or unit in the provincial department of education or in other departments primarily concerned with issues related to school-work transitions?*

    The Department of Education created a position in November 1996 responsible for school-work transition programs. The Department of Advanced Education and Labour in April 1997 established the

Postsecondary Innovations Group with transition programs as part of its mandate. On the French side, responsibility is with the Direction des services pédagogiques.

11. *Are there changes being made or planned in the structure or curriculum of schools that are intended to have an impact on school-work transitions?*

    K-12 comprehensive and developmental guidance programs have been created. These include career and educational portfolio planning for students entering Grade 6 and maintained through graduation (in progress). High schools are becoming four-year institutions. A new Foundation Program has been developed for Grades 9 and 10 based on outcomes leading to the Atlantic Canada Essential Graduation Learnings; career and life management is a component of the Foundation Program. In the French sector, there is a new four-year 32-credit program with stress on student learning that is creditable, enduring and transferable.

12. *Are there special initiatives sponsored by the province dealing with programs or services in school-work transitions (transition programs, youth employment, etc.)?*

    Initiatives include the NB Youth Apprenticeship Program, High School Co-op Programs, Industry Association Sector Council Initiatives in various areas, Entrepreneur Program, Student Venture Capital Program, Job Action Program, Partners Program, Youth Program, NB EarthWorks, Learning Associates, Information Technology Job Ready Workforce Initiative, Canada-New Brunswick Youth Services Program, Programme d'orientation à la carrière, Éducation co-opérative, Entrepreneuriat, Jeunes entrepreneurs.

13. *Are there school districts with innovative programs in this area?*

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14. *Are there individual schools with innovative programs?*

    All school districts, French and English, offer the NB Youth Apprenticeship Program and many are involved in programs such as those with J.D. Irving Limited and NB Tel (Job Quest, Family Connections Talk Mail Initiative, Teacher Internship Program, Youth Connections Jeunesse).

15. *Are there examples of business and industry becoming involved in helping young people make the transition from secondary school to work?*

    Business and industry are heavily involved, in both English and French sectors, through the NB Youth Apprenticeship Program, cooperative education, work experience, job shadowing and postsecondary internship and cooperative programs.

16. *Is the provincial government involved in programs at the postsecondary level?*

    Yes (see Question 12).

Trends

17. *What have been the major trends in the past five years in "traditional" secondary school vocational programs (carpentry, auto mechanics, etc.)? In enrolments? In program development? In resource allocation?*

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18. *What have been the major trends in secondary school technical or career programs (CAD, CAM, office practice, etc.)?*

    Traditional vocational programs, including office practice and home economics, have been declining over the past five years due to enrolment drops, maintenance costs and the establishment of technology labs in schools. CAD, CAM and similar programs continue. The French sector has eliminated vocational programs.

19. *What have been the major trends in postsecondary career and technical programs (e.g. in community colleges)?*

    Trends include employer advisory committees for technical programs, four weeks to six months' work experience in technical

programs, and program offerings tied to labour market analysis.

Programs

20. Are there required or optional courses in technology at the secondary school level?

All students are required to demonstrate minimum competence in computer literacy and achieve the technology outcomes of the Foundation Program. There are optional courses in technologies in the English sector and a required course in the French sector.

21. Do many secondary schools offer work-study or cooperative education programs? In what occupational areas? Do community colleges offer such programs? Are these programs effective?

Most English and many French high schools offer experiential work-study programs, primarily cooperative education. All English and French school districts offer the Youth Apprenticeship Program. Surveys support benefits of these programs but no long-range studies have been undertaken.

22. Do secondary schools commonly offer career information and counselling programs to students? On what data do they rely? How effective are these programs?

Guidance counsellors offer career information and guidance, including career fairs and postsecondary visits. The new comprehensive and developmental guidance and counselling model is expected to enhance effectiveness of programs.

23. What is the general situation of school-business partnerships? Are they common? Is the number increasing? Are there different models? What appear to be the benefits of these partnerships? Are there areas of concern?

Many models of partnerships have been established throughout the province and business and education partnership policy is presently being drafted. There are no particular areas of concern.

24. Is much use being made of the Conference Board of Canada's "Employability Skills?" If so, how?

The skills are embedded in the curriculum of cooperative education, youth apprenticeship programs and career and educational portfolio planning. The Postsecondary Innovations Group is a member of the Conference Board Forum on Employability Skills.

25. Are there special secondary school programs for certain targeted populations such as Aboriginal youth, students with special difficulties and challenges, women interested in non-traditional occupations, visible minorities, students with poor literacy skills and students at risk of leaving school? Are these programs effective?

All sectors of the population are served within the dual French and English systems. There are special programs in literacy, and programs for students at risk, Aboriginal youth and non-traditional careers for women. Similar programs exist in Advanced Education and Labour (e.g. community adult literacy, women in apprenticeship). Effectiveness is monitored but there are no long-range studies.

26. Are there tech-prep or applied academic courses and programs? Examples?

These are presently under review. The Youth Apprenticeship Program guarantees placement in community college and preferred admission status in university. Articulation agreements exist in journalism, medical laboratory science, gerontology, hospitality and tourism.

27. Are school-based enterprises common? Examples?

There are many not-for-profit and for-profit activities in schools at the secondary level; running a canteen or building a home or community playground are examples.

28. Are formal mentoring programs common? Examples?

Mentoring is a component of the Youth Apprenticeship Program and at-risk

programs; it is a key component of NB EarthWorks Program.

29. *Is there a focus on outcomes-based education, mastery learning or cross-curricular expectations?*

Outcomes-based education and cross-curricular expectations are the cornerstone of the Foundation Program (Grades 9 and 10). Community college curriculum is outcomes-based. French programs are under review.

30. *Are there special adult education programs directed to youth in transition? Are there data on the clientele of these programs (e.g. level of schooling)?*

Community colleges offer academic upgrading on site and through distance education, leading to an Adult High School Diploma. Extensive literacy programs are offered by Literacy New Brunswick. Most HRDC-NB offices offer employability skills training. Other areas include personal development, anger management and self-esteem.

Youth

31. *Are there distinctive characteristics of the youth in the province (geographic distribution, size of cohort, ethnic/linguistic diversity, educational attainment)?*

Educational attainment varies by region of the province, rural and urban; 3 to 9 percent of youth have less than nine years of education, 2.2 to 7.1 percent have a university degree. Regional employment differences also exist, especially urban-rural.

32. *Are there gender differences in attainment and career aspirations?*

Females have slightly more education than males but tend to earn less. Males outnumber females in processing and transportation occupations, primary industries, processing and manufacturing. The reverse is true in sales and service, business, finance and administration, and health. In many cases, the differences in representation are substantial.

33. *Have there been important changes in the educational and career aspirations of youth in recent years?*

A definite shift is taking place toward technical training, specifically in the information technology industry at the postsecondary level.

Research

34. *Are there any research projects or pilot projects recently completed or currently under way dealing with:*
    - *the problems of young people finding jobs,*
    - *the effectiveness of transition programs, and*
    - *the job opportunities for young people over the next few years in the province?*

Life After High School: A Study of School Leavers (in progress); School Leaving Age Task Force (1997); *New Brunswick at the Doorstep of the 21st Century* (Samuel LeBreton, HRDC, in press); and Premier's Forum on Youth (1997).

35. *Are there other points, examples or comments that would clarify the situation of youth transition in the province?*

Education/training is the key to success in transition, but no longer the guarantee of employment opportunities in a limited job market. Skill development must be matched with realistic expectations, and transition programs require full support of business and the community.

ONTARIO

General

1. *How would your province define the concept "transition from initial education to working life?"*

   There is no formal definition but the working definition refers to the transition of individuals from secondary school to work, rather than to formal postsecondary education and training, or from formal postsecondary education and training to work. The more usual statement is "school-to-work transition." The transition may be direct (graduates or early leavers) or indirect and extended (out-of-school youth initially unsuccessful in finding a job). The transition period may involve a number of stages characterized by contingent work of short duration followed by unemployment.

2. *Are there particular factors in the economic situation of the province that affect school-work transitions for young people?*

   Factors include:

   - continuing downsizing during the 1990s in public and private sectors, increasing competition for new jobs, especially for youth;
   - new technologies and restructuring demanding higher minimum skills;
   - drop in youth participation in the labour market from 74 percent in the late 1980s to below 63 percent in 1996 (with economic improvement, youth participation expected to rise and thus youth unemployment not expected to fall substantially);
   - gradual improvement in youth (age 20-24) unemployment rate in the past few years;
   - unemployment rate for youth 15 to 19 double that of youth 20 to 24 (20% vs. 12.8%), (many in the 15-19 age group have less than high school education); and
   - age group 15 to 19 expected to increase ("echo kids" of baby boomers).

3. *How serious is the problem of school-work transitions in the province? For university graduates? For graduates of community colleges? For secondary school graduates and leavers?*

   Employment chances are strongly linked to education, but even youth with postsecondary diplomas or degrees have an above-average unemployment rate. The impact is particularly pronounced for youth without work experience and seniority. Approximately 50 percent of high school students (graduates and early leavers) are faced with direct transition from high school to work.

   In 1996, unemployment rates varied according to educational level:
   - eight or fewer years of schooling: 24.6%
   - less than high school graduation: 23.4%
   - high school graduation: 13.4%
   - some postsecondary credentials: 12.3%
   - postsecondary credentials: 9.5%

4. *Is the transition taking longer than it did 10 years ago?*

   Yes.

5. *In general, is the transition occurring at a later age?*

   In general, yes. Decline in youth employment and labour force participation has been paralleled by an increase in youth full-time school attendance (in 1996, 85% for the 15-19 age group, 37% for the 20-24 age group).

6. *In general, is the period of transition more difficult or more complex or more traumatic than it used to be?*

   The period is more difficult, complex and traumatic, due to ongoing downsizing, new technologies and restructuring, higher education requirements, poor employment prospects for those with limited education, increasing part-time work for those who have left school, and concentration of youth in jobs with low pay and in unstable occupations.

7. *Is the transition more difficult for certain groups of young people than for others? Which groups?*

   It is more difficult for those with low levels of education.

8. *Does the province have data related to transition programs from school to work (volume, target population, characteristics of clientele served, cost, sources of funding, admission requirements and prerequisites, nature of the program, evaluation of effectiveness)?*

   There are limited data for secondary school-to-work programs. The Workplace Preparation Branch collects quarterly statistics on its Career and Preparation Program and longer-term evaluations are planned.

9. *Are there special studies (policy documents, research reports, working papers, program evaluations) related to transitions in your province? Would you send a copy with the responses to these questions?*

   - *Ontario Secondary Schools (1998): Detailed Discussion Document*
   - *Choices into Action: Guidance and Career Education Policy, Grades 1 to 12* (1998);
   - *Curriculum for Ontario Secondary Schools*;
   - *Consultation Guide*;
   - *What People Said about High School Reform – Apprenticeship Reform*;
   - Ontario Community Discussion Reports:
   - #1 *Employment, Education, Training*
   - #2 *Access & Equity*
   - #3 *Service Effectiveness*

Initiatives

10. *Is there a special department or unit in the provincial department of education or in other departments primarily concerned with issues related to school-work transitions?*

    Transition issues cut across several divisions and branches of the Ministry of Education and Training. Responsibility is shared between the Secondary School Project in the Elementary/Secondary Policy Division and the Training Division. The Secondary School Project develops secondary school policies, including those addressing school-to-work transition for high school students, and also administers a number of related programs based in high schools, including Career Education Projects, Co-operative Education/Work Experience Programs and Bridges Programs (a structured school-to-work transition program). The Workplace Preparation Branch of the Training Division shares responsibility for the Ontario Youth Apprenticeship Program with the Secondary School Project. The Workplace Support Services Branch of the Training Division administers a number of employment programs for out-of-school youth, unemployed youth and summer student employment. The Ministry of Education and Training recently formed a school-to-work transition committee, with representatives from each area, to share information and develop a more comprehensive vision of transitions.

11. *Are there changes being made or planned in the structure or curriculum of schools that are intended to have an impact on school-work transitions?*

    Yes. Secondary school reform is under way and will result in a new four-year secondary program (to start in 1999 for Grade 9 students). Features include high graduation standards, clear course requirements for postsecondary studies and work, clearer reporting to parents, improved guidance and career education, expanded cooperative education and work experience and a new structured school-to-work transition program. Changes in guidance and career education programs include: starting in Grade 7, all students are required to develop an education plan annually, and schools are required to have a program effectiveness survey every three years for career education programs. The issue of streaming students in Grades 9 to 12 has not yet been decided. The Apprenticeship Program is currently under review and a new program to target jobless youth will be announced in the fall of 1997.

12. *Are there special initiatives sponsored by the province dealing with programs or services in school-work transitions (transition programs, youth employment, etc.)?*

    Yes. The Ministry is sponsoring transition-related projects including:

    - Bridges Transition to Work: Addresses work-bound Grade 10 to 12 students and includes (a) school-based individualized curriculum, (b) work-based component with clear expectations, (c) joint private sector and education management. Between 1995 and 1997, 10 projects have been approved.
    - Co-operative Education and Work Experience: Cooperative education is a well-established program emphasizing career exploration and planning through integrated work placement and classroom study. Work experience programs are shorter and focus on application of work-related course outcomes to workplace and community settings as part of course credit.
    - Career Education Partnership Projects: These include partnerships between schools and community organizations to provide career information and employment counselling to students.
    - Co-operative Education Tax Credit: Tax credits are provided to businesses to offer placements to co-op students in colleges and universities.
    - Ontario Youth Apprenticeship Program: This Ministry-funded program in 81 school boards links 800 to 900 senior high school students a year to the workplace, involving community partnerships with local chambers of commerce, unions, industry-education councils and colleges.
    - Ontario Summer Jobs 1997: This $37-million program helps 34,000 youth find summer jobs.
    - Career Employment Preparation Program: This program for unemployed, out-of-school youth represents over one half of the government's total youth employment budget and is designed to improve client access to services using institutions and agencies in over 110 communities.
    - Literacy and Basic Skills Program: The focus is on people without work, especially those receiving social assistance.
    - Adult Education Project: The project offers alternative and drop-in secondary education for 18- to 24-year-olds.
    - Information for Students: The Ministry offers a Website called Career Gateway and publishes, with HRDC, *Ontario Prospects*, a guide to career planning distributed to all high schools.

13. *Are there school districts with innovative programs in this area?*

    Yes, but the Ministry does not maintain a database of most of these programs.

14. *Are there individual schools with innovative programs?*

    Yes, but the Ministry does not maintain a database of most of these programs.

15. *Are there examples of business and industry becoming involved in helping young people make the transition from secondary school to work?*

    Partnerships are involved in programs such as Bridges and the Ontario Youth Apprenticeship Program. The Ministry is developing a partnership strategy to expand such programs as part of the secondary school reform. Partnerships involve working with employers to identify local employment opportunities, train individuals and offer services such as mock interviews and job shadowing.

16. *Is the provincial government involved in programs at the postsecondary level?*

    Colleges of Applied Arts and Technology (CAATs) and the majority of Ontario universities offer cooperative education or work internship programs. The Ministry funds the Workers' Compensation liabilities for participating students.

Trends

17. *What have been the major trends in the past five years in "traditional" secondary school vocational programs (carpentry, auto mechanics, etc.)? In enrolments? In program development? In resource allocation?*

    These programs have been declining since the early 1980s. A new program, Broad-based Technological Education, replaces 90 specific vocational courses with seven broad-based technology programs.

18. *What have been the major trends in secondary school technical or career programs (CAD, CAM, office practice, etc.)?*

    The Communications Technology program in the Broad-based Technological Education program has grown faster than other areas, for male and female students, at both general and advanced levels.

19. *What have been the major trends in postsecondary career and technical programs (e.g. in community colleges)?*

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Programs

20. *Are there required or optional courses in technology at the secondary school level?*

    Students must complete either a business or technological credit for graduation and there are optional Broad-based Technological Education courses.

21. *Do many secondary schools offer work-study or cooperative education programs? In what occupational areas? Do community colleges offer such programs? Are these programs effective?*

    All school boards offer cooperative education programs for senior high school students. Evidence of effectiveness is anecdotal, but these programs receive continued support from employers and are in demand by students.

22. *Do secondary schools commonly offer career information and counselling programs to students? On what data do they rely? How effective are these programs?*

    Yes, and there is wide variety in services and programs and in the sources of information used; career information is mandated in each subject guideline.

23. *What is the general situation of school-business partnerships? Are they common? Is the number increasing? Are there different models? What appear to be the benefits of these partnerships? Are there areas of concern?*

    Partnerships, many local and small scale, are growing in number, but there is no database of the exact number. Partnerships are a required feature of the Bridges program and the Ministry is developing a partnership strategy.

24. *Is much use being made of the Conference Board of Canada's "Employability Skills?" If so, how?*

    Many schools are using the profile to develop curriculum units and cross-curricular outcomes.

25. *Are there special secondary school programs for certain targeted populations such as Aboriginal youth, students with special difficulties and challenges, women interested in non-traditional occupations, visible minorities, students with poor literacy skills and students at risk of leaving school? Are these programs effective?*

    Such programs are determined within school boards and schools. The Ministry funds a program entitled *Change Your Future* in cooperation with other bodies to help minority youth stay in school.

26. *Are there tech-prep or applied academic courses and programs? Examples?*

    Neither term is currently used but the concepts are related to the Broad-based Technological Education program.

27. *Are school-based enterprises common? Examples?*

    Anecdotal evidence suggests some examples through cooperative education or technological studies applications.

28. *Are formal mentoring programs common? Examples?*

    These are becoming more common. Examples include mentoring by senior citizens for at-risk students and business mentors for students in cooperative education and work experience programs.

29. *Is there a focus on outcomes-based education, mastery learning or cross-curricular expectations?*

    The term "expectations" is used instead of "outcomes." The elementary curriculum focuses on expectations and standards in key areas and the new secondary curriculum will build on these.

30. *Are there special adult education programs directed to youth in transition? Are there data on the clientele of these programs (e.g. level of schooling)?*

    Some programs are based on principles of adult education. The Career Employment Preparation Program provides workplace preparation programs for youth outside of school.

Youth

31. *Are there distinctive characteristics of the youth in the province (geographic distribution, size of cohort, ethnic/linguistic diversity, educational attainment)?*

    - The youth share of the labour market has been falling gradually over time (26% 20 years ago vs. 16% today).
    - The part-time employment rate for youth is 50 percent vs. 19 percent for the overall labour force.
    - Youth are staying in school longer and are better educated.
    - Unemployed youth do not have access to the financial support available to other unemployed workers.

32. *Are there gender differences in attainment and career aspirations?*

    Yes, but no specific information is available.

33. *Have there been important changes in the educational and career aspirations of youth in recent years?*

    Youth need to see a greater connection between school and work and want more control over education and training decisions. The labour market has become more complex and more difficult to access.

Research

34. *Are there any research projects or pilot projects recently completed or currently under way dealing with:*
    - *the problems of young people finding jobs,*
    - *the effectiveness of transition programs, and*
    - *the job opportunities for young people over the next few years in the province?*

    The Bridges transitions to work program; Enhanced Employability Project of the Employment Preparation Unit to test different types of employment preparation models for the chronically unemployed, including youth; and Career and Employment Preparation Program to enhance the involvement of employers in building employment directions for program participants, including an individualized service response so that youth can access only the services they need.

35. *Are there other points, examples or comments that would clarify the situation of youth transition in the province?*

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MANITOBA

General

1. *How would your province define the concept "transition from initial education to working life?"*

   There is no working definition, but a number of programs include assistance in the transition.

2. *Are there particular factors in the economic situation of the province that affect school-work transitions for young people?*

   Manitoba has more rapid recovery from the 1991-92 recession than most other provinces. Forecasts for employment growth are optimistic. Manitoba has the highest employment/population ratio among full-time students of all provinces; 32 percent of non-students 15 to 24 work fewer than 35 hours per week compared to 29 percent for Canada. There are special problems in remote communities and Indian reserves.

3. *How serious is the problem of school-work transitions in the province? For university graduates? For graduates of community colleges? For secondary school graduates and leavers?*

   Youth unemployment is lower than in most other provinces, but there are fewer full-time jobs for young non-students.

4. *Is the transition taking longer than it did 10 years ago?*

   Unemployment rates are slightly lower.

5. *In general, is the transition occurring at a later age?*

   Data are not available, but there appears to be no significant change.

6. *In general, is the period of transition more difficult or more complex or more traumatic than it used to be?*

   The transition is less complex than during the recession in the early 1990s.

7. *Is the transition more difficult for certain groups of young people than for others? Which groups?*

   Aboriginal youth are drawing more attention as they move to Winnipeg. Transition is difficult for postsecondary graduates without a career focus.

8. *Does the province have data related to transition programs from school to work (volume, target population, characteristics of clientele served, cost, sources of funding, admission requirements and prerequisites, nature of the program, evaluation of effectiveness)?*

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9. *Are there special studies (policy documents, research reports, working papers, program evaluations) related to transitions in your province? Would you send a copy with the responses to these questions?*

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Initiatives

10. *Is there a special department or unit in the provincial department of education or in other departments primarily concerned with issues related to school-work transitions?*

    Yes, the Youth Programs Branch within Manitoba Education and Training.

11. *Are there changes being made or planned in the structure or curriculum of schools that are intended to have an impact on school-work transitions?*

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12. *Are there special initiatives sponsored by the province dealing with programs or services in school-work transitions (transition programs, youth employment, etc.)?*

    The Children and Youth Secretariat provides a system-wide approach to transition problems, involving departments of Health, Family Services, Justice, and Education and Training.

13. *Are there school districts with innovative programs in this area?*

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14. *Are there individual schools with innovative programs?*

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15. *Are there examples of business and industry becoming involved in helping young people make the transition from secondary school to work?*

Winnipeg and Manitoba chambers of commerce and a number of individual businesses are involved.

16. *Is the provincial government involved in programs at the postsecondary level?*

Youth Programs services includes CareerFocus, Youth info.works, Partners with Youth, Young Entrepreneurs, Urban Green Team, REDI Green Team, Hometown, STEP services, Quebec Exchange, Career Options for Students with Disabilities, Volunteers in Public Service and Manitoba Youth Job Centres.

Trends

17. *What have been the major trends in the past five years in "traditional" secondary school vocational programs (carpentry, auto mechanics, etc.)? In enrolments? In program development? In resource allocation?*

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18. *What have been the major trends in secondary school technical or career programs (CAD, CAM, office practice, etc.)?*

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19. *What have been the major trends in postsecondary career and technical programs (e.g. in community colleges)?*

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Programs

20. *Are there required or optional courses in technology at the secondary school level?*

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21. *Do many secondary schools offer work-study or cooperative education programs? In what occupational areas? Do community colleges offer such programs? Are these programs effective?*

Many secondary schools are offering work experience or cooperative education programs in auto body repairs and mechanics, day care worker, hospitality training, metal machining, building operation and health care aide. Also, community colleges offer business administration and motor vehicle mechanics as well as practicums in health fields; graduates of such programs have better employment rates and higher wages.

22. *Do secondary schools commonly offer career information and counselling programs to students? On what data do they rely? How effective are these programs?*

Secondary schools have guidance counsellors doing career counselling and information dissemination, relying on HRDC and Manitoba Education and Training. Effectiveness depends on time allocated; personal counselling is often seen as more critical. There is an optional course called Skills for Independent Living which provides career planning.

23. *What is the general situation of school-business partnerships? Are they common? Is the number increasing? Are there different models? What appear to be the benefits of these partnerships? Are there areas of concern?*

Partnerships appear to be increasing in most urban divisions and in several rural divisions; programs vary from work experience, mentoring and apprenticeships to "Take your kid to work" days.

24. *Is much use being made of the Conference Board of Canada's "Employability Skills?" If so, how?*

Several schools use the list for skills portfolios which compile evidence of work experiences, volunteer activities, extracurricular activities, awards and projects; students use these portfolios in job applications.

25. *Are there special secondary school programs for certain targeted populations such as Aboriginal youth, students with special difficulties and challenges, women interested in non-traditional occupations, visible minorities, students with poor literacy skills and students at risk of leaving school? Are these programs effective?*

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26. *Are there tech-prep or applied academic courses and programs? Examples?*

There is a wide variety of technical, vocational and industrial education programs.

27. *Are school-based enterprises common? Examples?*

These are not common, but a few schools offer entrepreneurship training.

28. *Are formal mentoring programs common? Examples?*

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29. *Is there a focus on outcomes-based education, mastery learning or cross-curricular expectations?*

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30. *Are there special adult education programs directed to youth in transition? Are there data on the clientele of these programs (e.g. level of schooling)?*

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Youth

31. *Are there distinctive characteristics of the youth in the province (geographic distribution, size of cohort, ethnic/linguistic diversity, educational attainment)?*

There is a large and increasing proportion of Aboriginal youth (14% of the 15-24 cohort in 1991) with average educational levels lower than those of the general population. Winnipeg metropolitan area takes up close to two thirds of the Manitoba population and employment.

32. *Are there gender differences in attainment and career aspirations?*

There are significant gender differences in career aspirations.

33. *Have there been important changes in the educational and career aspirations of youth in recent years?*

Youth appear to expect greater cost for postsecondary education and less secure employment, but expectations may be overly pessimistic as the economy improves.

Research

34. *Are there any research projects or pilot projects recently completed or currently under way dealing with:*
    - *the problems of young people finding jobs,*
    - *the effectiveness of transition programs, and*
    - *the job opportunities for young people over the next few years in the province?*

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35. *Are there other points, examples or comments that would clarify the situation of youth transition in the province?*

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http://www.hrdc-drhc.gc.ca/arb/publications/books/working/working.shtml

BRITISH COLUMBIA

General

1. *How would your province define the concept "transition from initial education to working life?"*

   Career development is one of the three goals of education in British Columbia and is designed "to prepare students to attain their career and occupational objectives and to assist in the development of effective work habits and the flexibility to deal with change in the workplace."

2. *Are there particular factors in the economic situation of the province that affect school-work transitions for young people?*

   The economy and labour market are experiencing changing structural forces and pressures, many of them externally driven. These include globalization of markets, technological change, changing consumer-driven demands, changing patterns of trade and changing demographic trends. New economic activity and jobs in technology, service and information sectors are causing an upward shift in skill needs, while many traditional sectors require a changing and increasing set of skills. There is increasing integration of the steps of production/provision of a product/service, combined with a drive to add value and reduce cost, and this is resulting in reduced core organizations with more specialized suppliers and contractors. This makes school-to-work transition more complex and difficult.

3. *How serious is the problem of school-work transitions in the province? For university graduates? For graduates of community colleges? For secondary school graduates and leavers?*

   Transition poses a major problem for the least educated. There are widening unemployment rates between those with least and most education (6.6% for those with a postsecondary degree or diploma vs. 16.6% for those with less than a high school education); 83 percent of job openings between 1990 and 1996 were filled by those with a postsecondary credential; since 1988, employment rates for those with high school completion or less have deteriorated and the transition from school to work for those with secondary or less has become much more difficult in the last 10 years.

4. *Is the transition taking longer than it did 10 years ago?*

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5. *In general, is the transition occurring at a later age?*

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6. *In general, is the period of transition more difficult or more complex or more traumatic than it used to be?*

   The length of transition from a traditional notion of full-time school to full-time work has clearly increased, but the start and end points of transitions have blurred because of part-time work and part-time study. Because of this, there has been an increase in the age of those completing postsecondary education, as well as a delay in traditional family and household formation and in child bearing.

7. *Is the transition more difficult for certain groups of young people than for others? Which groups?*

   It is more difficult for Aboriginal youth (31% of those entering Grade 8 will graduate) and for all those who have not completed high school.

8. *Does the province have data related to transition programs from school to work (volume, target population, characteristics of clientele served, cost, sources of funding, admission requirements and prerequisites, nature of the program, evaluation of effectiveness)?*

   There are various sources of data; the Ministry has created the Centre for Educational Information Systems and Standards, in partnership with various institutions and organizations, whose mission is to provide effective system-wide data and information services and standards for the education system.

9. *Are there special studies (policy documents, research reports, working papers, program evaluations) related to transitions in your province? Would you send a copy with the responses to these questions?*

The following form the basis for the current direction of the Ministry of Education, Skills and Training:

- *Moving On: Secondary to Postsecondary Transition* (1997)
- *Charting a New Course: A Strategic Plan for the Future of British Columbia's College, Institute and Agency System* (1996)
- *A Profile of Youth in British Columbia* (1995)
- *A Guide to the BC Economy and Labour Market* (1996)
- *The Kindergarten to Grade 12 Education Plan* (1996)

Initiatives

10. *Is there a special department or unit in the provincial department of education or in other departments primarily concerned with issues related to school-work transitions?*

The Careers Programs Branch of the Education Programs Division within the Ministry of Education, Skills and Training has the responsibility for school-work transitions.

11. *Are there changes being made or planned in the structure or curriculum of schools that are intended to have an impact on school-work transitions?*

Recent changes in the graduation requirement mean all students must meet the outcomes of the Career and Personal Planning course. This course provides an opportunity to explore different career paths. In addition, recent curriculum revisions have included the release of more than 60 Integrated Resource Packages which include outcomes related to career awareness and applications to the workplace.

12. *Are there special initiatives sponsored by the province dealing with programs or services in school-work transitions (transition programs, youth employment, etc.)?*

A Guarantee for Youth programs range from a Government Work Experience Program to Student Summer Works, the latter being an employment and training program for secondary and postsecondary students which reimburses employers a portion of students' wages. This program gives priority to science and technology and other key sectors, and is delivered by community agencies under contract with the province.

13. *Are there school districts with innovative programs in this area?*

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14. *Are there individual schools with innovative programs?*

Information is unavailable at this time.

15. *Are there examples of business and industry becoming involved in helping young people make the transition from secondary school to work?*

At the present time, 46,000 secondary students are enrolled in a career program with a work experience component; all students must complete a minimum of 30 hours of work experience in order to graduate. Examples of partnerships with business and industry include Wood Products Manufacturing, tourism, an internship sponsored by the Applied Science Technologists and Technicians of British Columbia, and Woodlands funded by Forest Renewal BC.

16. *Is the provincial government involved in programs at the postsecondary level?*

The government has a direct role in college and institute programming, combining the institution's specific community knowledge and educational needs with the system-wide perspective of the Ministry. The Ministry has a New Degree Approval Process and a New Program Review Process to review the educational merits of

new programs. Under the *Charting a New Course* strategic plan, the Ministry, with the colleges and institutes, is setting up a Program Planning and Rationalization Process to review all existing programs.

Trends

17. What have been the major trends in the past five years in "traditional" secondary school vocational programs (carpentry, auto mechanics, etc.)? In enrolments? In program development? In resource allocation?

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18. What have been the major trends in secondary school technical or career programs (CAD, CAM, office practice, etc.)?

The number of new participants in career education courses has gone from 9,916 in 1991 to 27,474 in 1996, with the largest growth in the Natural and Applied Science area.

19. What have been the major trends in postsecondary career and technical programs (e.g. in community colleges)?

Between 1991 and 1995, there was a 15.9 percent increase in funded full-time equivalent students in career and technical programs, compared with an overall college/institute increase of 13.6 percent. In 1994 and 1995, under the Skills Now! initiative, enrolment expansion shifted from academic to applied, technical and career programs and new kinds of applied programs were introduced, supported by a $3.5 million allocation. The British Columbia Institute of Technology and Emily Carr College of Art and Design were given degree-granting status for new technical degrees and the Technical University of British Columbia was established.

Programs

20. Are there required or optional courses in technology at the secondary school level?

In order to graduate, students must complete two credits in Applied Skills in Grade 11, with a choice among Business Education, Home Economics and Technology Education.

21. Do many secondary schools offer work-study or cooperative education programs? In what occupational areas? Do community colleges offer such programs? Are these programs effective?

All secondary schools must offer a four-credit course required for graduation called Career and Personal Planning, one credit of which is a minimum of 30 hours of work experience. There are also three career programs: Career Preparation (120 hours of experience), Co-operative Education (240 hours) and Secondary School Apprenticeship (240 hours). These programs are effective for students focused on a career path and others exploring a variety of areas.

22. Do secondary schools commonly offer career information and counselling programs to students? On what data do they rely? How effective are these programs?

School counsellors have as their mandate a percentage of time for career counselling though crisis counselling makes heavy demands on their time; most counsellors schedule time to interview all students about course selection and postsecondary plans. Most secondary schools have Career Centres developed from funds available through the Skills Now! initiative and which have print resources and often Internet connections. Schools may also subscribe to Bridges, a resource for accessing career information on the Internet. Two credits of the required Career and Personal Planning course are for personal planning and the completion of a student learning plan.

23. *What is the general situation of school-business partnerships? Are they common? Is the number increasing? Are there different models? What appear to be the benefits of these partnerships? Are there areas of concern?*

- Local school districts have developed school/community partnerships for work experience, mentorship, Co-op education, Career Preparation courses, apprenticeships, and Career and Personal Planning courses.
- The Provincial Partnership Projects Steering Committee has representatives from business, industry, and education, and works to develop resources and projects to promote career programs and work experience.
- School District No. 75 (Mission) and University College of the Fraser Valley co-manage a project to include a secondary school, university college campus, and community arts, recreation and learning centre in one complex; it includes the potential to begin postsecondary studies in high school.
- Project Benchmark is a technology alliance of British Columbia and the BC Tel Discovery Learning Centre to co-manage projects linking curriculum outcomes to industry requirements for technology skills.
- A Wood Products Manufacturing Career Preparation Program is being co-developed by industry and educators to reflect the industry's Basic Skills Profile and address training from secondary to postsecondary levels.
- The Heart and Stroke Foundation provides work experience for Science Career Preparation students.
- The Classroom to Career project is co-managed by the Ministry and the B.C. Chamber of Commerce to match work experience students with employers.
- Work Experience for Educators is a joint project of the Ministry, the B.C. Business Council and the B.C. Teachers' Federation to place teachers in local workplaces relevant to their subject area during professional days or summer holidays.
- English at Work gives teachers an opportunity to be introduced to the language of contracts, code books and technical manuals through site visits, simulations or presentations by trades instructors.
- The Mining Partnership Project, in conjunction with the Mining Association of B.C., gives teachers a chance to visit mining sites.
- Science/Education Projects, in conjunction with Science World, offers a program on Scientists in Schools, a Career Centre and an on-line magazine.

24. *Is much use being made of the Conference Board of Canada's "Employability Skills?" If so, how?*

The Profile is referred to in the Integrated Resource Package of the Career and Personal Planning course for resources and assessment activities, and for the assessment of students in work sites. The list of employability skills has been complemented by documents of the Business Council of B.C. and the B.C. Labour Force Development Board.

25. *Are there special secondary school programs for certain targeted populations such as Aboriginal youth, students with special difficulties and challenges, women interested in non-traditional occupations, visible minorities, students with poor literacy skills and students at risk of leaving school? Are these programs effective?*

Such programs fall into one of the categories of Career Preparation programs, or federally or provincially funded short-term projects. There are programs for First Nations students on futures, art, life skills, pre-employment and special needs work study. Construction Technology for Women is a federally funded project to encourage women students to develop skills in CAD, CAM and construction technologies; Women in Trades, Technology

and Blue Collar Work has sponsored camps and Secondary School Apprenticeship programs have encouraged female student participation with the result that gender balance in youth apprenticeships is better than for adult apprentices. The effectiveness of these programs has not been measured provincially.

26. *Are there tech-prep or applied academic courses and programs? Examples?*

    Applied academics is used in four new curriculum areas: information technology, applications of mathematics, applications of physics, and technical and professional communications.

27. *Are school-based enterprises common? Examples?*

    They are not common, but some examples include operating woodlot licences, a student-operated store for marketing products and the operation of a dry kiln.

28. *Are formal mentoring programs common? Examples?*

    Some formal programs may exist but informal mentoring relationships are far more common in work experience and co-op placements. One formal program links secondary school science students in the Vancouver area with university co-op students from Simon Fraser University in their work placement; it is funded through the HRDC Youth Internships program.

29. *Is there a focus on outcomes-based education, mastery learning or cross-curricular expectations?*

    In the past two years, the Ministry has been developing new curriculum packages for kindergarten through Grade 12; these are called Integrated Resource Packages and contain provincially required learning outcomes, instruction and assessment strategies and suggested support materials.

30. *Are there special adult education programs directed to youth in transition? Are there data on the clientele of these programs (e.g. level of schooling)?*

    School districts, colleges and institutes offer adult basic education for high school completion and skill upgrading. Community-based Skill Centres provide adult access to programs.

Youth

31. *Are there distinctive characteristics of the youth in the province (geographic distribution, size of cohort, ethnic/linguistic diversity, educational attainment)?*

    Components have been answered in previous questions.

32. *Are there gender differences in attainment and career aspirations?*

    In 1995, the graduation rates were 75.2 percent for females and 66.9 percent for males, and the rates have been consistently higher for females since 1986. In 1994, 11 percent of secondary school computer science teachers were female; 17 percent of undergraduate students in postsecondary engineering and applied science were female in 1992; 6 percent of new 1994 apprentices and 3 percent of new appointees in traditional male trades were women.

33. *Have there been important changes in the educational and career aspirations of youth in recent years?*

    Graduates are more inclined than leavers to seek occupations in social science, education, government service and religion, health occupations, natural and applied sciences, and business and administration; leavers are more inclined to seek sales and service occupations, trades or to be unsure. Women are inclined to mention health, social science, education and government; males tend toward natural and applied science, trades or jobs in primary industries.

Research

34. Are there any research projects or pilot projects recently completed or currently under way dealing with:

- *the problems of young people finding jobs,*
- *the effectiveness of transition programs, and*
- *the job opportunities for young people over the next few years in the province?*

Major government initiatives include *Investing in our Future: A Guarantee to Youth* and the Centre for Educational Information Standards and Services.

35. Are there other points, examples or comments that would clarify the situation of youth transition in the province?

Refer to various government Websites such as:
<http://www.est.gov.bc.ca/k12cp/cp_report/info.html>
<http://www.ceiss.org>